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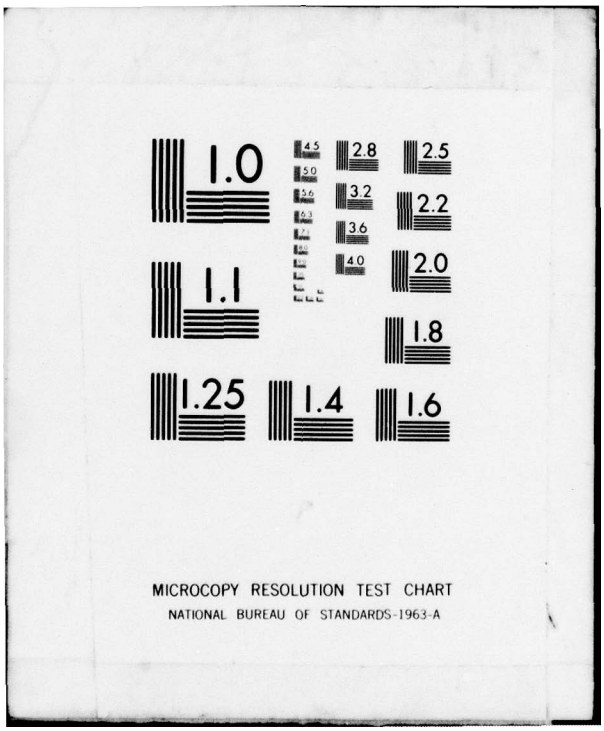
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Report 1070-06-79-CR

LEVEL III

Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS)

Final Report and Report of Task G

Near- and Long-Term Improvements

By:

Francis O. Deppner
John J. Anderson
Whitney C. Scully

September 1979

OPERATIONS ANALYSIS GROUP

GENERAL RESEARCH CORPORATION

A SUBSIDIARY OF FLOW GENERAL INC.

7655 Old Springhouse Road, McLean, Virginia 22102

Submitted To:

Mr. Gene P. Hill
Force Accounting and Systems Division
Office of the Deputy Chief of Staff for Operations and Plans
Washington, D. C. 20310

Contract No. MDA903-78-C-0445

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number):
This report identifies the specific improvement actions required to bring an improved on-line SACS to fruition. The actions have been further broken into subtasks, dependency relationships have been established, and tasks have been identified as being either near-term (1-12 months) or long-term (up to 32 months). The report also contains a network schematic which portrays the sequence in which the SACS

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Block 4 (continued)

Report of Task G - Recommend Feasible and Cost Effective Near-Term and Long-Term Improvements That Will Contribute to the Eventual Realization of an On-Line SACS

Block 20 (continued)

improvement work should be accomplished during the full 32 months of effort.

PROJECT SUMMARY

The purpose of this project was to conduct an "Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS)." The results of this analysis are contained in seven reports prepared during the period 1 September 1978 to 31 August 1979. Each task report was received, evaluated, and accepted, some with Army agency comments which were considered in developing subsequent reports, as appropriate. The seven reports are summarized below.

Task A was to "Develop a Comprehensive Plan for Accomplishment of the Objectives Stated in ODCSOPS Work Statement, August 1978." This comprehensive plan provided a detailed description of the tasks and subtasks and established a schedule for accomplishing the tasks and delivery of final reports. Tasks were executed according to the plan with very minor schedule changes. The plan served as the principal management tool to control the orderly progression of the project. Task A was completed on 29 September 1978.

Task B was to "Identify the ADP Systems and the Functional Procedures Required to Produce and Validate LOGSACS and PERSACS Outputs." The purpose of this task was to identify and to document SACS procedures, SACS data bases, SACS data sources, and SACS system support as required to describe the current SACS. This task met the primary objective of establishing the baseline system description from which changes and improvements could be recommended. The report of this task provided the ARSTAF overall documentation on the current SACS and because of its comprehensive nature, Army managers have become more aware of SACS' complexity and pervasiveness throughout the Army. It also highlighted the increasing importance of and need for SACS as the primary source of logistics and personnel requirements and authorizations data. The Task B report is the only current comprehensive description of the Army's Structure and Composition System. Task B was completed on 15 January 1979.

Task C was to "Analyze the Accuracy and Timeliness of Available Data Used in the Current LOGSACS and PERSACS." The purpose of the task was to determine if the data flow in the current SACS satisfied the timeliness and accuracy requirements necessary to support materiel acquisition and distribution, and personnel recruiting, training, reclassification, promotion, and distribution functions. The report not only identified a number of specific timeliness and accuracy problems but also identified the primary causes of the problems and recommended solutions. Task C was completed on 21 March 1979.

Task D was to "Develop the Data Requirements for an On-Line LOGSACS and PERSACS." The task objectives were to specify the functional concept for the improved/on-line SACS, the data timeliness criteria, the data accuracy criteria, and to identify the data elements required to support the concept. On 9 April 1979, a preliminary draft for comment was provided to ODCSOPS and the ARSTAF. On 29 April 1979, ODCSOPS(DAMO-FDA) hosted a conference to discuss the draft report. The preliminary/on-line SACS concept was accepted, and staff and user comments were incorporated in the report. Task D was completed on 23 May 1979.

Task E was to "Analyze the Current and Developing Systems Which Interface with LOGSACS and PERSACS to Determine to What Extent They Do or Do Not Support the Data Requirements of an On-Line SACS." The purpose of the report was to delineate which improved/on-line SACS conceptual and data requirements could be satisfied by the current and developing systems (e.g., FORDIMS and VFDMIS) and which could not be satisfied. Task E was completed on 29 June 1979.

Task F was to determine "How Current and Developing Systems and Their Associated Management Procedures Should Support the Requirements of an On-Line SACS." The purpose of this task was to provide the details of the operational concept for the improved/on-line SACS, specify the changes required in current and developing systems, and to identify other requirements related to the improved/on-line SACS. Task F established

the improved/on-line SACS concept baseline which can be the basis for further development efforts. Task F was completed on 8 August 1979.

Task G, the final task of the SACS project, is entitled "Recommended Feasible and Cost-Effective Near-Term and Long-Term Improvements That Will Contribute to the Eventual Realization of an On-Line SACS." The purpose of this report was to identify the specific changes and additions to the current SACS which can be made in the near- and long-term to achieve the on-line SACS. In addition, a general systems development plan was included which identified the major milestones required to manage and accomplish the development of the on-line SACS. Task G, the final phase of the SACS project, is completed with the delivery of this report.

The seven task reports described above constitute the most current and comprehensive description of SACS. They provide a functional and system requirements concept for the improved/on-line Structure and Composition System. In addition to describing on-line SACS requirements, a number of recommended improvements for the current force structure feeder systems are identified. Since the SACS products are the result of data from several feeder systems, they reflect the data accuracy and timeliness of those systems. Therefore, in addition to improvements in SACS software and processes, full realization of needed improvements also involves consideration of FORDIMS, VTAADS, ITAADS, and the Guidance Tracking Procedures. In order to achieve fully the improved data accuracy and timeliness standards identified in the Report of Task F, some procedural and software changes involving feeder systems are appropriate.

Recommended changes can be divided into three categories.

Actions necessary to achieve the improved/on-line SACS are:

- Establish automated procedures to initiate SACS processing (3.4.6)[1]

[1] Numbers in parentheses refer to paragraphs in F. O. Deppner et al., Report of Task F - How Current and Developing Systems and Their Associated Management Procedures Should Support the Requirements of an On-Line SACS, General Research Corporation, Report 1070-05-79-CR, August 1979.

- Redesign SIGMA as a new SACS processing program utilizing the FORDIMS files stored in the FSS and AS (3.4.7)
- Upgrade and link all basic SACS, LOGSACS, and PERSACS software to a SACS control module (3.4.7)
- Establish a SACS record control and audit procedure (3.4.4)
- Upgrade the BOIP process to accommodate impact determination for DAMO-RQ and DAMO-FD (3.4.8)
- Upgrade the SHN system to provide an on-line, operationally interactive capability (3.4.10)
- Implement a capability for reflecting equipment and personnel phasing in LOGSACS and PERSACS (3.4.11)
- Develop the capability for a SACS data base that would be periodically updated and become the source for ad hoc retrievals and recurring requirements and authorizations reports for distribution to the ARSTAF and field activities (3.4.16)

Additional SACS-related actions necessary to improve data accuracy and timeliness which have impact on procedures and SACS feeder systems are:

- Establish a force structure configuration management and control group (SYCMACG) (3.2)
- Implement improved EDATE rules in all force structure systems (3.4.1)
- Implement improved unit documentation rules (3.4.2)
- Establish and implement standard data element value edits in all force structure systems (3.4.3)
- Establish data flow cutoff dates for force structure systems and implement requirements for reconciliation and balancing against authorized totals (3.4.5)
- Review HQDA requirements for the TOE computational file and determine if TRADOC can accommodate the requirements (3.4.9)

- Implement procedures for positive identification of reimbursable personnel (3.4.12)
- Implement an automated review procedure for augmentation units (3.4.13)
- Implement a procedure whereby HQDA can input equipment and personnel detail to the AS as "official" data (3.4.14)
- Designate a Section II, TAADS document review activity (3.4.15)
- Prepare appropriate SACS documentation for internal DCSOPS, ARSTAF, and field activities (3.4.18)
- Implement selected changes to data elements to accommodate functional user requirements (3.4.19)
- Implement a data synchronization capability whereby control type data elements used for interfacing and sequencing records between each of the force structure systems are changed on a coordinated schedule (3.4.20)
- Restructure force management responsibilities (3.4.23)

Other SACS-related actions are:

- Provide for SACS history to be maintained for at least 7 years (3.4.17)
- Upgrade the automated analyzers--PAAS and BOIMARS (3.4.21)
- Implement system file back-up and restore capability (3.4.22)

CONTENTS

ABBREVIATIONS AND ACRONYMS

AAO	Army Acquisition Objective
ACC	US Army Communications Command
ADCON	Army Deployment Control Code
ADP	Automatic Data Processing
AESRS	Army Equipment Status Report System
AFP	Army Force Program
AMIS	Army Management Information System
AMSCO	Army Management Structure Code
AOC	Army Operations Center
ARLOC	Army Location Code
ARSTAF	Army Staff
AS	Authorization Subsystem
ASI	Additional Skill Indicator
AUDB	Authorizations Data Base
AURS	Automated Unit Reference Sheet
AUTS	Automated Update Transaction System
BOIMARS	Basis of Issue Monitoring and Recording Systems
BOIP	Basis of Issue Plan
Br	Branch
BRNCH	Branch
BY	Budget Year
CBS	Civilian Budgeting System
CCNUM	Command Control Number
CCT	Consolidated Change Table
COMPO	Component Code
CONUS	Continental United States
CPU	Central Processing Unit
CSR	Chief of Staff Regulations
CY	Calendar Year
DA	Department of the Army

DAMO-FDA	DCSOPS, Force Management, Force Accounting and Systems Division
DAMO-RQR	DCSOPS, Requirements, Requirement Programs and Priorities Division
DAMPL	Department of the Army Master Priority List
DAPE-MBA	DCSPER, Manpower, Plans and Budget, Allocation and Documentation Division
DAPPL	Department of the Army Planning Priority List
DARCOM	US Army Materiel Development and Readiness Command
DBMS	Data Base Management System
DCSLOG	Deputy Chief of Staff for Logistics
DCSOPS	Deputy Chief of Staff for Operations and Plans
DCSPER	Deputy Chief of Staff for Personnel
DCSRDA	Deputy Chief of Staff for Research, Development, and Acquisition
DEPLO	Deployment Location Code
DESCOM	US Army Depot System Command
DFSR	Detailed Functional Systems Requirement
DOCNO	Document Number
DPMNT	Deployment
DPI	Data Processing Installation
DPS	Decision Package Set
EARA	US Army Equipment Authorization Review Activitiy
EDATE	Effective Date
EQPF	Equipment Phasing File
ERC	Equipment Requirement Code
FAS	Force Accounting System
FDMIS	Force Development Management Information System
FICOD	Force Identification Code
FORDIMS	Force Development Integrated Management System
FSS	Force Structure Subsystem
FYDP	Five Year Defense Plan
Gd	Grade
GFSR	General Functional Systems Requirement
GOCOM	General Officer Command

HQDA	Headquarters Department of Army
H-530	Equipment Validation Report (prepared at DESCOM from LOGSACS data)
IIO	Initial Issue Quantity
IPR	In-Progress Review
ITAADS	Installation TAADS
JCS	Joint Chiefs of Staff
LEA	US Army Logistics Evaluation Agency
LIC	Language Indicator Code
LIN/LINUM	Line Item Number
LOGSACS	Equipment (Logistics) Structure and Composition System
MACOM	Major Command
MARCM	Major US Army Reserve Command
MILID	Military Identity Aggregate
MILPERCEN	US Army Military Personnel Center
MIS	Management Information System
MISEA	Management Information Systems Economic Analysis
MOC	Management of Change
MOS/MOSCO	Military Occupational Specialty
MRC	US Army Materiel Readiness Command
MTOE	Modified Table(s) of Organization and Equipment
NATO	North Atlantic Treaty Organization
ODSLOG	Office, Deputy Chief of Staff for Logistics
ODCSOPS	Office, Deputy Chief of Staff for Operations and Plans
ODCSPER	Office, Deputy Chief of Staff for Personnel
ODCSRDA	Office, Deputy Chief of Staff for Research, Development, and Acquisition
OPAGY	Operations Agency
OPP	Organization and Personnel Plan
OSD	Office of the Secretary of Defense
PAAS	Personnel Authorizations Analysis System
PBG	Program and Budget Guidance
P/BS	Program/Budget Subsystem
PDM	Program Decision Memorandum

PEM	Phased Equipment Modernization
PERDIMS	Personnel Deployment and Distribution Management System
PERSACS	Personnel Structure and Composition System
PM	Project Manager
PMP	Project Master Plan
POM	Program Objective Memorandum
POMCL	POMCUS ID for LIN
POMCUS	Prepositioning of Materiel Configured to Unit Sets
POMCU	POMCUS ID for Unit
PPBS	Planning, Programming, and Budgeting System
PROFA (FORFA)	Master Force
PY	Program Year
QQPRI	Qualitative and Quantitative Personnel Requirements Information
Qtr	Quarter
Qty	Quantity
RCOMD	Resource Command
RDAISA	US Army Research, Development, Acquisition Information Systems Agency
RDP	Required Deployment Data
REQVAL	Requisition Validation
ROBCO	Readiness Objective Code
ROMSR	Rounding by Most Significant Residuals
SACS	Structure and Composition System
SA	Semi-Annual
SAMPAM	System for Automation of Materiel Plans for Army Materiel
SB	Supply Bulletin (700-20)
SBCOM	Subcommand Code
SHN	Short Hand Note
SIGMA	SACS Information Gathering and Management Analysis System
SRC/SRCOD	Standard Requirements Code
SSN	Standard Study Number

STATS	Unit Status Code
SYCMACG	System Configuration Management and Control Group
TAA	Total Army Analysis
TAADS	The Army Authorization Documents System
TAEDP	Total Army Equipment Distribution Program
TC	Type Classification
TDA	Tables of Distribution and Allowances
TDATE	Termination Date
TL	Troop List
TLR/S	Total Logistic Readiness/Sustainability
TOE	Tables of Organization and Equipment
TRADOC	US Army Training and Doctrine Command
UIC/UICOD	Unit Identification Code

SECTION 1
INTRODUCTION

1.1 BACKGROUND

This is the final report of an ODCSOPS project entitled "Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS)," Contract Number MDA903-78-C-0445, dated 26 September 1978. This report also covers Task G, "Recommendations for Feasible and Cost-Effective Near- and Long-Term Improvements That Will Contribute to the Eventual Establishment of an On-Line SACS," the final task of the aforementioned project. The task objectives were to:

- Recommend feasible near-term improvements
- Recommend feasible long-term improvements
- Recommend plans for accomplishing near- and long-term improvements

1.2 METHODOLOGY EMPLOYED

The methodology employed in the performance of this task was to utilize information from previous tasks[1] and identify the feasible changes needed to create a new improved/on-line SACS. The sequential major subtasks necessary to incorporate the changes into SACS were then identified. These major subtasks have been separated into near- and long-term categories (see Appendix B). The relationships between subtasks of different changes were thus determined and depicted on a network which related all subtasks to a time line. A Systems Development Plan was then developed to support the implementation of recommended changes which will result in an improved/on-line SACS.

1.3 SCOPE

The scope of this task encompassed organization of recommended changes and improvements into tasks which can be accomplished in the

[1] F. O. Deppner et al., Report of Task D - Data Requirements Document, General Research Corporation, Report 1070-03-79-CR, May 1979; F. O. Deppner et al., Report of Task F.

near-term and in the long term and preparation of a recommended SACS development plan.

Further, the near- and long-term actions identified herein must also involve other force structure and related systems if full capabilities of an improved/on-line SACS are to be achieved. These systems are:

- Force Development Integrated Management System (FORDIMS)
- Vertical Force Development Management Information System (VFDMIS) (when implemented)
- Table of Organization and Equipment (TOE) System
- Basis of Issue Plans (BOIP) System
- Short Hand Notes (SHN) System
- Vertical The Army Authorization Documents System (VTAADS)
- Installations The Army Authorization Documents System (ITAADS)
- Vertical Force Accounting System (VFAS)
- Military Occupational Specialty (MOS) System
- Supply Bulletin 700-20 (SB700-20) System
- Phased Equipment Modernization (PEM) System for the Equipment Phasing File (EQPF)

1.4 REPORT ORGANIZATION

This report is organized into two major parts: the first (Section 2) provides the identification of recommended changes and their categorization as near- and long-term changes. Section 3 is the recommended development plan required to integrate the near- and long-term changes into the current SACS in order to provide an improved/on-line SACS. The hierarchical structure of the improved/on-line SACS software program modules is shown in Figure 3.1 and Appendix A. The improved on-line SACS concept which was previously described[1] is not detailed herein;

[1] F. O. Deppner et al., Report of Task F, p. 10.

however, Figure 1.1, the conceptual schematic, is included for reference purposes.

This report has four appendixes. They are:

- Appendix A - Detailed Modules of the SACS Principal Functions
- Appendix B - Near-Term and Long-Term Actions Summary
- Appendix C - Near-Term Actions - Detailed Descriptions
- Appendix D - Long-Term Actions - Detailed Descriptions

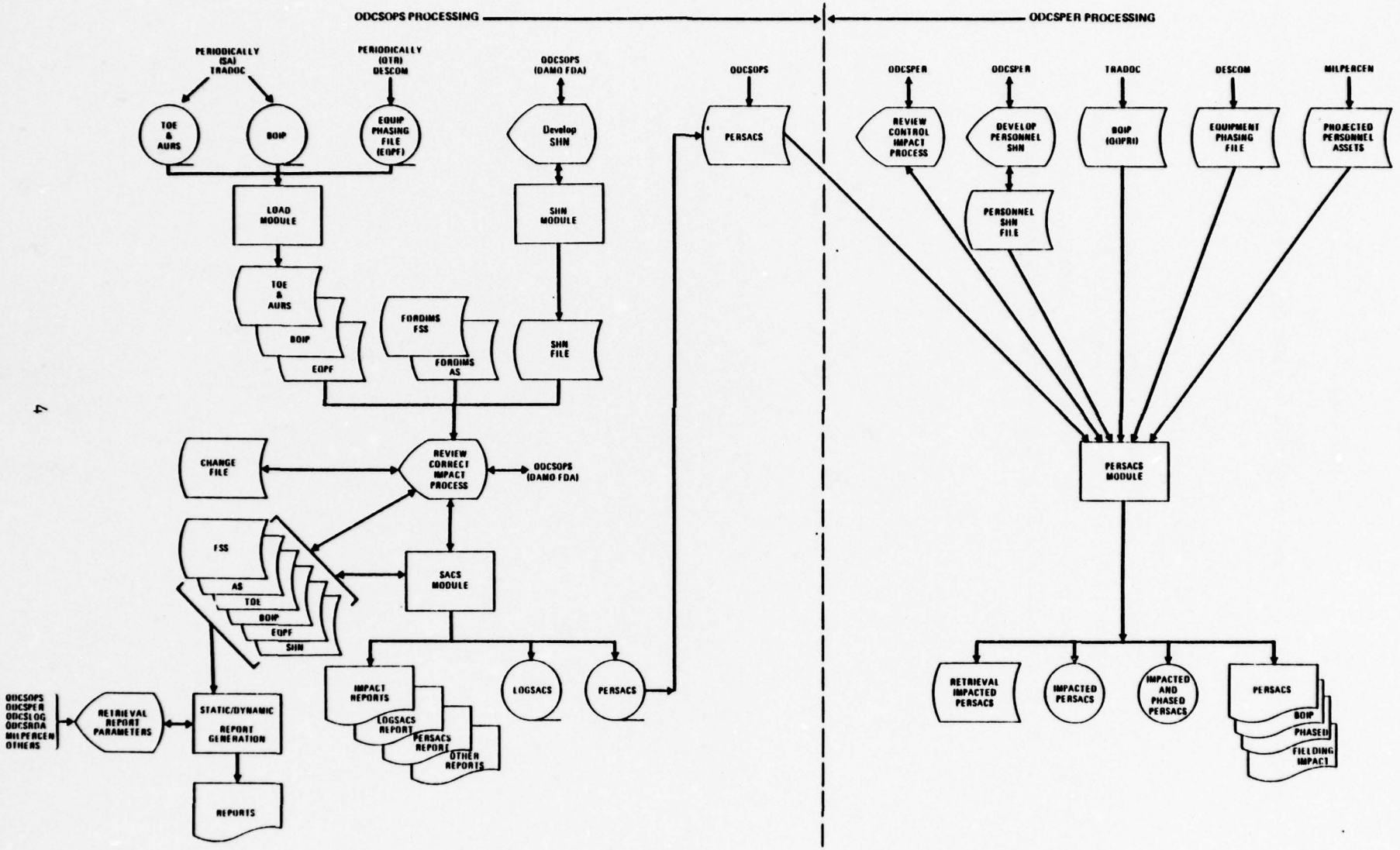

Figure 1.1. Proposed Improved/On-Line SACS

SECTION 2

NEAR- AND LONG-TERM SACS IMPROVEMENTS

2.1 GENERAL

The near- and long-term SACS improvements are not only related to SACS, but also related to and impact on the overall force development and force structure systems because SACS relies on obtaining its data from these systems. Since SACS has no data base, nor data base maintenance responsibility, SACS products reflect the data accuracy and timeliness, or lack thereof, of the data that are provided by the SACS feeder systems:

- FORDIMS FSS (formerly FAS)
- FORDIMS AS (formerly HQDA TAADS)
- TOE
- BOIP (used in LOGSACS only)
- SHN (used in LOGSACS only)

Consequently, when SACS improvements were identified,[1] they were related to the specific system listed above and their respective feeder systems; for example, the FORDIMS AS has VTAADS as a feeder system which in turn has ITAADS as a feeder system. It is important to understand the data flow through the SACS feeder systems[2] to appreciate and understand the need for changes to SACS feeder systems. With this understanding of how feeder systems contribute data to SACS, it can be seen that SACS data accuracy and timeliness are the result of feeder system data quality, the overall force structure systems management and control process, their associated manual procedures, and computer software.

The direct SACS improvements being recommended are related to upgrading the current SACS manual procedures and batch-type sequential magnetic-tape-oriented computer programs to on-line programs utilizing mass storage, interactive terminals, and state-of-the-art ADP technology.

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[1] F. O. Deppner et al., Report of Task F, p. 10.

[2] F. O. Deppner et al., Report of Task C - Data Analysis of Accuracy and Timeliness, General Research Corporation, Report 1070-02-79-CR, March 1979, p. 9.

In this respect, in upgrading SACS to an on-line operation, the current 30 days to develop PERSACS and 45 days to develop LOGSACS can be reduced to several days, if not hours. To achieve this, SACS must be redesigned and reprogrammed to take advantage of current equipment and technology with all SACS operations controlled via interactive software and remote terminals by ODCSOPS(DAMO-FDA) personnel.

2.2 DEFINITIONS

2.2.1 Near-Term

Near-term is defined as from 1 to 12 months from the date of project initiation.

2.2.2 Long-Term

Long-term is defined as those tasks that will require in excess of 12 months from the date of task initiation but should not exceed 12 months.

2.2.3 Tasks

Described in the Report of Task F[1] are recommended improvement changes regarding force structure functional areas and systems that involve SACS. In this report, specific near- and long-term tasks have been identified to accomplish these recommended changes. They are listed in Appendix B. Each listed task can be further subidvided into subtasks for actual accomplishment. Appendixes C and D are more complete descriptions of the near- and long-term subtasks which should be accomplished to achieve an improved/on-line SACS capability.

2.3 IMPACT OF IMPROVEMENTS

The changes required to achieve an improved/on-line SACS are primarily the upgrading of SACS to take advantage of state-of-the-art ADP technques, available equipment, and improved logic to better support the

[1] This report identified 24 separate recommended changes; each change was identified with specific tasks for its accomplishment.

ARSTAF and field activities' needs for requirements and authorizations information. Improvements identified will impact on FORDIMS (and the developing VFDMIS), TAADS, ITAADS, TOE, BOIP, SHN, LIN (SB700-20), MOS, and other systems. Since the information produced in the LOGSACS and PERSACS is only as accurate and timely as its feeder data bases, the overall feeder systems and data flows were considered when formulating the list of recommended changes to support the improved on-line SACS.

The Army processes of force structure development, resource requirements computations, and resource distribution are completely integral to the Army Planning, Programming, and Budgeting System (PPBS). To this end the LOGSACS and PERSACS information are pervasive throughout the Army and Defense establishments and are critical to overall Army resource formulation, management, and distribution. Without proposed improvements, the Army will not be able to do a fully effective job of resource management.

SACS products are critical to the Army's functions of requirements computation for procurement [the Army Acquisition Objective (AAO) and the Army Materiel Plan (AMP)], equipment distribution [the Total Army Equipment Distribution Plan (TAEDP)], and personnel requirements computation, recruiting, training, and distribution. These three functions utilize SACS products as principal input data. The accuracy and timeliness of the SACS-produced requirements and authorizations data impact upon resource managers' ability to improve management and distribution of increasingly fewer resources. In addition, the SACS products reflect the BOIP changes to requirements[1] which are the result of the Army modernization programs. No other Army system provides overall modernization data to the procurement and distribution processes; therefore, SACS is truly a critical system and its products provide key data for Army resource management.

Some improvements identified apply to existing force structure systems policy and, in some cases, new policies are suggested. Other

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[1]LOGSACS only; BOIP must be implemented in PERSACS.

improvements pertain to increasing the effectiveness of managing SACS: single source of data, data management, configuration management, improved documentation of the system, and others. All improvements center on the major objective of improving SACS data accuracy and timeliness. Table 2.1 depicts the impact recommended changes will have on systems, Army activities, and documentation.

2.4 IMPROVEMENTS

Appendix B lists the near- and long-term actions required to implement an on-line SACS; these are discussed in Appendixes C and D. These actions are grouped in the following three categories:

- Actions essential to establish the on-line SACS
- Actions essential to achieve data accuracy and timeliness in SACS information
- Actions related to SACS

The first two categories identify requirements that must be met to achieve the objectives of an on-line SACS with the capability to produce accurate and timely information.

TABLE 2.1

IMPACTS OF PROPOSED CHANGES

RECOMMENDED CHANGES	FEEDER SYSTEMS					CHANGES WILL HAVE IMPACT ON								REFERENCE
	VFDMIS					DA STAFF FUNCTIONAL MANAGERS	LOGISTIC MANAGERS	PERSONNEL MANAGERS	MACOM	ARMY REGULATIONS	OVERALL MANAGEMENT CONTROL	SOFTWARE PROGRAMS	HARDWARE CONFIGURATION	ADDITIONAL INFORMATION IN REPORT OF TASK F PARAGRAPH
	FORDIMS FSS	AS	TOE	BOIP	SHN									
ESTABLISH SYCMACG (CONFIGURATION CONTROL)	PARTICIPANT					PRIMARY	PARTICIPANT	PARTICIPANT	PARTICIPANT (by invitation)	X	X			3.2
EDATE RULES	X	X				INITIATES			INITIATES	X	X	X		3.4.1
DOCUMENTATION CHANGE RULES		X				INITIATES			IMPLEMENTS	X	X	X		3.4.2
MODIFY DATA FLOW CONSTRAINTS, AND RESPONSE TIME STAND.	X	X				INITIATES			X	X	X	X		3.4.5
TRADOC MODIFY BOIP SO DA IS NOT REQUIRED TO UPDATE				X		INITIATES			TRADOC		X	X		3.4.8
TRADOC MODIFY TOE TO PARENT UNIT LEVEL			X			INITIATES			TRADOC		X	X		3.4.9
TOP LOAD DETAIL DATA AT DA		X				INITIATE	PARTICIPATE	PARTICIPATE	X	X	X	X		3.4.14
ESTABLISH A TAADS PERSONNEL REVIEW ACTIVITY		X						INITIATE		X	X	X		3.4.15
DEVELOP SACS DOCUMENTATION						INITIATES					X			3.4.18
DATA SYNCHRONIZATION	X	X	X	X	X	INITIATES				X	SYCMACG	X		3.4.20
CHANGE TO ORGANIZATION STRUCTURE	X					INITIATES				X		X		3.4.23
UPGRADE BOIP & SHN IN LOGSACS				X	X	INITIATES	X					X		3.4.8 3.4.10
DATA FLOW/BALANCING OF FORCE STRUCTURE DATA BASES	X	X				INITIATES				X		X		3.4.5
ESTABLISH AUDIT PROCEDURES	X	X	X	X	X	PRIMARY					X	X		3.4.4
IDENTIFICATION OF REIMBURSABLE PERSONNEL	X	X				PRIMARY		X	X			X		3.4.12
ALIGN AUGMENTATION UNIT WITH MTOE UNIT	X											X		3.4.13
TOP LOAD DETAIL DATA AT DA		X			X	PRIMARY	X		X	X	X	X		3.4.14
DEVELOP SACS HISTORY FILE						INITIATE					X	X		3.4.17
ADD & DELETE DATA ELEMENTS	X	X	X	X	X						X	X		3.4.19
MODIFY SPLIT UNIT IDENTIFICATION	X	X					X	X		X		X		3.4.19.2 f
														3.4.3

BURSABLE PERSONNEL						PRIMARY								
ALIGN AUGMENTATION UNIT WITH MTOE UNIT	X											X		3.4.13
TOP LOAD DETAIL DATA AT DA		X			X	PRIMARY	X		X	X	X	X		3.4.14
DEVELOP SACS HISTORY FILE						INITIATE					X	X		3.4.17
ADD & DELETE DATA ELEMENTS	X	X	X	X	X						X	X		3.4.19
MODIFY SPLIT UNIT IDENTIFICATION	X	X					X	X		X		X		3.4.19.2 f
DEVELOP & INSTITUTE COMPREHENSIVE EDIT RULES	X	X	X	X	X						X	X		3.4.3 3.4.20.2 c & d
SACS INITIATION THROUGH INTERACTIVE TERMINAL						PRIMARY					X	X	X	3.4.6
CONVERT TO INTERACTIVE SACS PROCESSING						PRIMARY					X	X	X	3.4.7
BOIP RESOURCE IMPACT PROCESS THROUGH INTERACTIVE TERMINAL				X		PRIMARY					X	X	X	3.4.8
APPLY BOIP TO PERSACS THROUGH INTERACTIVE TERMINAL[1]				X		PRIMARY					X	X	X	3.4.8
SHN PROCESS INITIATED THROUGH INTERACTIVE TERMINAL					X	PRIMARY					X	X	X	3.4.10
APPLY SHN TO PERSACS THROUGH INTERACTIVE TERMINAL[1]					X	PRIMARY					X	X	X	3.4.10
DEVELOP & INTEGRATE EQPF INTO SACS						PRIMARY	X			X	X	X		3.4.11
ON-LINE SACS DATA BASE W/ACTIONS SUSPENCE FILE & RECORD OF LAST ACTION						PRIMARY						X		3.4.16
UPGRADE PAAS & BOIMARS						X						X		3.4.21
DEVELOP BACKUP & RESTORE CAPABILITY INTO ON-LINE SACS						X						X		3.4.22
PLAN TO DEVELOP INTERFACE WITH VFDMIS	X	X	X			PRIMARY					X	X		3.3

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NOTES
1. DA FUNCTIONAL MANAGERS– FORCE STRUTURES AND MANPOWER MANAGERS.
2. LOGISTICS MANAGERS– ODCSLOG, ODCSRDA, EARA, RDAISA, DESCOM, AND OTHERS AS REQUIRED.
3. PERSONNEL MANAGERS– ODCSPER, MILPERCEN, AND OTHERS AS REQUIRED.
4. ODCSPER RESPONSIBILITY.

SECTION 3
SACS SYSTEMS DEVELOPMENT PLAN

3.1 GENERAL

This section describes the process of developing and implementing the near- and long-term changes described in Section 2 and Appendix B. The major subjects of this section are the work to be accomplished; the manpower, computer, and facilities requirements to support the development process; and the general management and control aspects of developing the improved/on-line SACS.

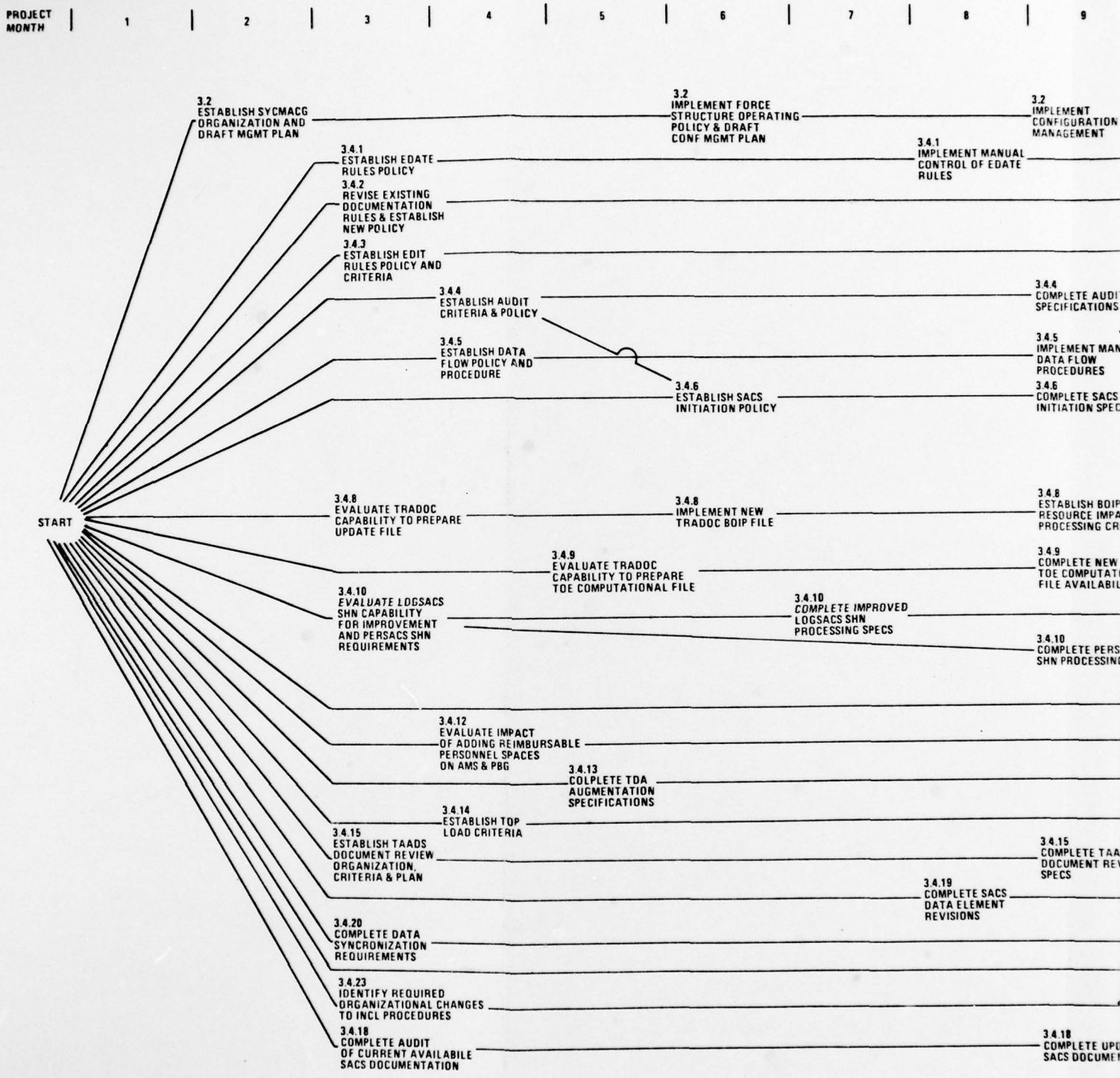
3.2 WORK TO BE ACCOMPLISHED

3.2.1 Change Implementation Network

Figure 3.1 is a network of the near- and long-term recommended changes necessary to develop an improved/on-line SACS. Each of the 24 recommended changes or tasks are identified by a number which refers to the paragraph in the Report of Task F that describes the recommended change. Each task is divided into one or more subtasks. Subtasks are identified with the same number as the task. Many tasks and subtasks can be accomplished independently from other subtasks. Other subtasks are related and dependent. The relationship, and in some cases dependency, is represented by the activity line drawn between subtasks. The entire network is time phased over a period of 32 months. Time, in months, is depicted by the time line at the top of the network sheet.

3.2.2 Direct SACS

The direct SACS work to be accomplished includes formulating, coordinating, and preparing policy for implementation in force structure systems; establishing BOIP and TOE requirements that may impact automated processes at TRADOC; establishing, developing, and implementing the on-line SACS to include BOIP impact and improved SHN processing; and preparing comprehensive SACS documentation for all users.


PROJECT MONTH
1
2
3
4
5
6
7
8
9
START
3.2 ESTABLISH SYCMACG ORGANIZATION AND DRAFT MGMT PLAN
3.2 IMPLEMENT FORCE STRUCTURE OPERATING POLICY & DRAFT CONF MGMT PLAN
3.2 IMPLEMENT CONFIGURATION MANAGEMENT
3.4.1 ESTABLISH EDATE RULES POLICY
3.4.1 IMPLEMENT MANUAL CONTROL OF EDATE RULES
3.4.2 REVISE EXISTING DOCUMENTATION RULES & ESTABLISH NEW POLICY
3.4.3 ESTABLISH EDIT RULES POLICY AND CRITERIA
3.4.4 ESTABLISH AUDIT CRITERIA & POLICY
3.4.4 COMPLETE AUDI SPECIFICATIONS
3.4.5 ESTABLISH DATA FLOW POLICY AND PROCEDURE
3.4.5 IMPLEMENT MAN DATA FLOW PROCEDURES
3.4.6 ESTABLISH SACS INITIATION POLICY
3.4.6 COMPLETE SACS INITIATION SPEC
3.4.8 EVALUATE TRADOC CAPABILITY TO PREPARE UPDATE FILE
3.4.8 IMPLEMENT NEW TRADOC BOIP FILE
3.4.8 ESTABLISH BOIP RESOURCE IMPA PROCESSING CR
3.4.9 EVALUATE TRADOC CAPABILITY TO PREPARE TOE COMPUTATIONAL FILE
3.4.9 COMPLETE NEW TOE COMPUTATI FILE AVAILABIL
3.4.10 EVALUATE LOGSACS SHN CAPABILITY FOR IMPROVEMENT AND PERSACS SHN REQUIREMENTS
3.4.10 COMPLETE IMPROVED LOGSACS SHN PROCESSING SPECS
3.4.10 COMPLETE PERS SHN PROCESSING
3.4.12 EVALUATE IMPACT OF ADDING REIMBURSABLE PERSONNEL SPACES ON AMS & PBG
3.4.13 COLPLETE TDA AUGMENTATION SPECIFICATIONS
3.4.14 ESTABLISH TOP LOAD CRITERIA
3.4.15 ESTABLISH TAADS DOCUMENT REVIEW ORGANIZATION, CRITERIA & PLAN
3.4.15 COMPLETE TAA DOCUMENT REV SPECS
3.4.19 COMPLETE SACS DATA ELEMENT REVISIONS
3.4.20 COMPLETE DATA SYNCRONIZATION REQUIREMENTS
3.4.23 IDENTIFY REQUIRED ORGANIZATIONAL CHANGES TO INCL PROCEDURES
3.4.18 COMPLETE AUDIT OF CURRENT AVAILABILE SACS DOCUMENTATION
3.4.18 COMPLETE UPD SACS DOCUME

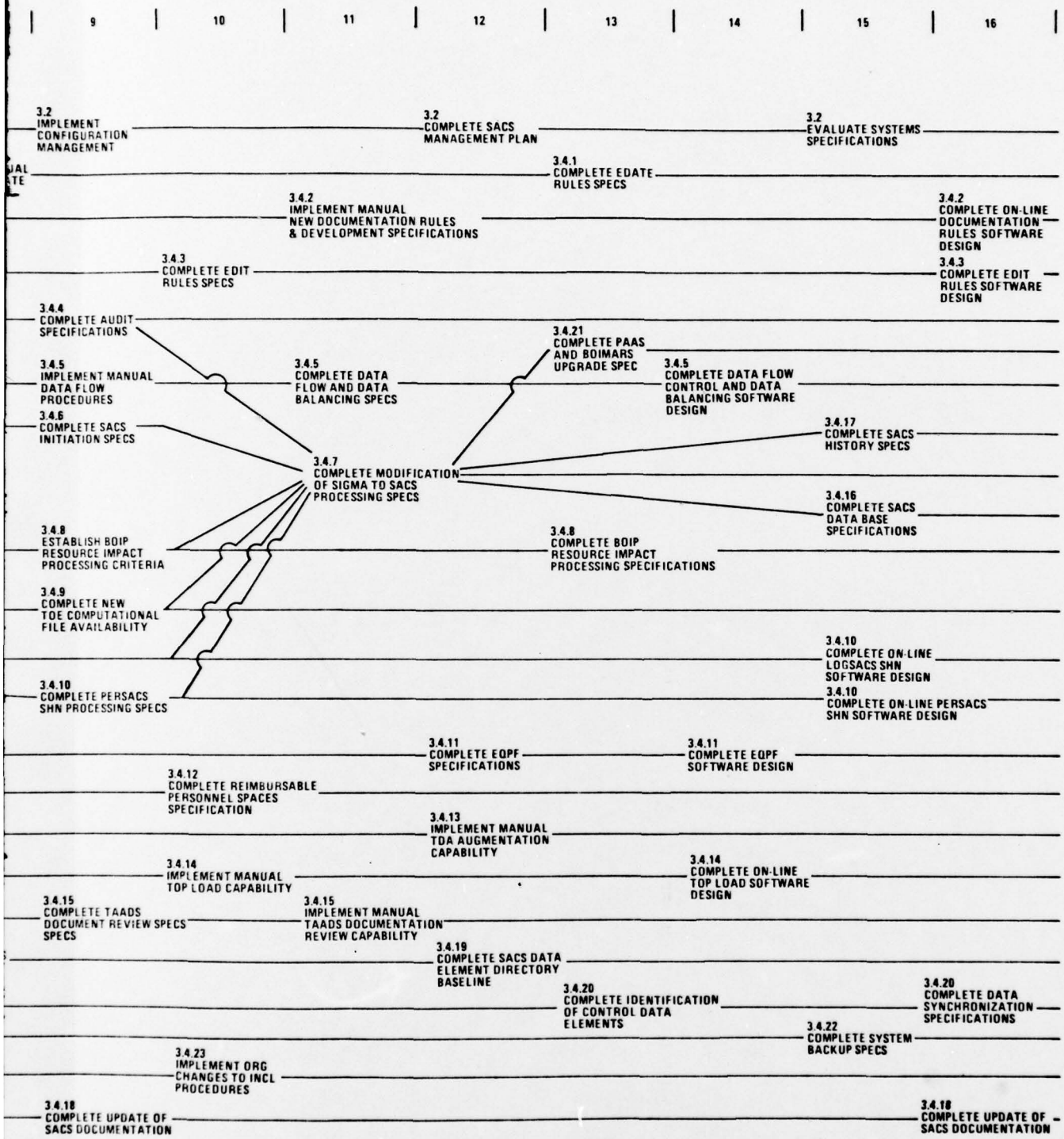
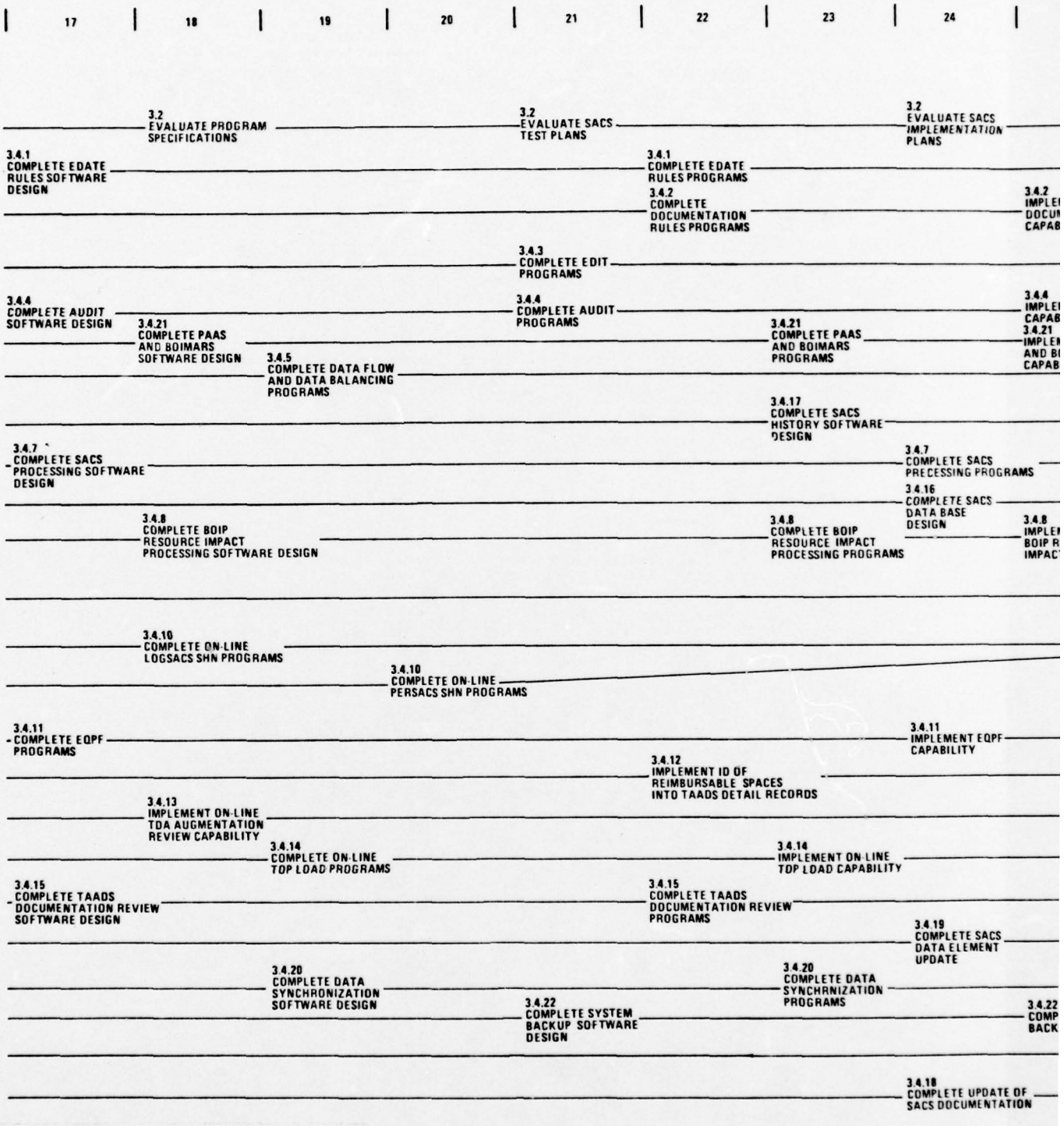


Figure 3.1. Changes



Implementation Network

24
25
26
27
28
29
30
31
32
ATE SACS
ENTATION
3.2
EVALUATE SACS
CONFIGURATION
3.2
UPDATE SACS
MANAGEMENT PLAN
3.2
CONTINUE
MANAGING SACS
3.4.1
IMPLEMENT EDATE
RULES CAPABILITY
3.4.2
IMPLEMENT ON-LINE
DOCUMENTATION
CAPABILITY
3.4.3
IMPLEMENT EDIT
CAPABILITY
3.4.4
IMPLEMENT AUDIT
CAPABILITY
3.4.21
IMPLEMENT PAAS
AND BOIMARS ON-LINE
CAPABILITY
3.4.5
IMPLEMENT DATA
FLOW CONTROL AND
DATA BALANCING
3.4.17
COMPLETE SACS
HISTORY PROGRAMS
3.4.17
IMPLEMENT SACS
HISTORY CAPABILITY
ETE SACS
SSING PROGRAMS
3.4.7
IMPLEMENT ON-LINE
INITIATION AND
SACS PROCESSING
COMPLETE
ETE SACS
BASE
N
3.4.16
IMPLEMENT SACS
DATE BASE
3.4.8
IMPLEMENT ON-LINE
BOIP RESOURCE
IMPACT CAPABILITY
3.4.9
IMPLEMENT NEW
TOE COMPUTATIONAL
FILE CAPABILITY
3.4.10
IMPLEMENT ON-LINE
SHN CAPABILITY
EMENT EQPF
BILITY
3.4.15
IMPLEMENT ON-LINE
TAADS DOCUMENTATION
REVIEW CAPABILITY
9
PLETE SACS
A ELEMENT
ATE
3.4.19
IMPLEMENT SACS
DATA ELEMENT
STANDARDS
3.4.20
IMPLEMENT DATA
SYNCHRONIZATION
CAPABILITY
3.4.22
COMPLETE SYSTEM
BACKUP PROGRAMS
3.4.22
IMPLEMENT SYSTEM
BACKUP CAPABILITY
3.4.23
COMPLETE REVIEW
AND EVALUATION OF SACS
ORGANIZAITON AND
STAFF PROCEDURES
LETE UPDATE OF
DOCUMENTATION
3.4.18
REVIEW & IMPLEMENT
SACS DOCUMENTATION
MAINTENANCE

15, 16

2

3.2.3 Indirect SACS

The indirect SACS work that should be accomplished, such as revisions to FORDIMS software, modification to TRADOC software, or modifications to TAADS and ITAADS, are not considered for accomplishment under the same effort that would accomplish the direct SACS work. It is assumed that the work requirements in these areas would be formulated by the SACS project personnel under approved DAMO-FD guidance. They would then be assigned to the appropriate agency for accomplishment of necessary tasks/subtasks consistent with the schedule for the on-line SACS development.

3.3 MANPOWER RESOURCES REQUIREMENTS

3.3.1 Professional Person-Years

Staffing requirements have been estimated based on the work that must be accomplished to achieve the near- and long-term direct SACS work only. These estimates do not include the manpower that may be required to revise SACS feeder systems (FSS, AS, TOE, BOIP, and SHN). The professional requirements are:

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1	5	6	6	6	5.75
2	7	9	9	9	8.50
3	9	6	5*	0	5.00
			Total professional person-years		19.25

*Two-month period

3.3.2 Support Person-Years

Administrative support requirements have been estimated based on work that must be accomplished to complete the documentation associated with all SACS improvements. The support requirements are:

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1	1	1	1	2	1.30
2	2	2	2	2	2.00
3	2	1	1*	0	0.95
			Total support person-years		4.25

*Two-month period

3.3.3 Project Team Composition

The project team would be composed of the personnel shown in Table 3.1. The personnel requirements are identified to each calendar year quarter of the 32-month period.

3.4 COMPUTER RESOURCE REQUIREMENTS

The computer resource requirements are estimated to provide an understanding of what will be required during the period that the on-line SACS is being developed. Table 3.2 is related to the use of TSO for interactive program development and remote printing of test results.

3.5 FACILITY RESOURCE REQUIREMENTS

3.5.1 Office Space

The office space requirements for the project team range from 700 to 1500 square feet over the period of the development and implementation effort. The office space provided should be a contiguous area that is quiet and conducive to uninterrupted individual work accomplishment. This office space may be provided in the Pentagon, other reasonable office building, or in a contractor's facility.

3.5.2 Conference Room

A conference room large enough to accommodate groups of up to 40 persons should be available on an as-required basis.

TABLE 3.1

PROJECT TEAM COMPOSITION

Personnel Category	Quarter										
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
Professional Staff											
Project Manager (GS-14)*	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Senior Analyst (GS-13)	3.0	3.0	3.0	3.0	2.0	2.0	1.0	1.0	1.0	2.0	2.0
Analyst (GS-12)	-	-	-	-	1.0	1.0	1.0	1.0	1.0	-	-
Senior Programmer (GS-13)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Programmer (GS-12)	-	1.0	1.0	1.0	2.0	4.0	5.0	5.0	5.0	2.0	1.0
Total	5.0	6.0	6.0	6.0	7.0	9.0	9.0	9.0	9.0	6.0	5.0
Support Staff											
Secretary (GS-6)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Typist (GS-5)	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	-	-
Illustrator (GS-5)	-	-	-	0.5	0.5	0.5	0.5	0.5	0.5	-	-
Total	1.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0
Aggregate Total	6.0	7.0	7.0	9.0	9.0	11.0	11.0	11.0	11.0	7.0	6.0

*Parenthetical entries represent the civil service grade level recommended for this project.

TABLE 3.2

COMPUTER RESOURCE REQUIREMENTS

Computer Resource	Quarter										
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
CPU time (hours)	20	40	40	40	60	100	120	120	120	60	40
Terminal (each)	1	2	2	2	3	5	6	6	6	3	2
Modem set	1	2	2	2	3	5	6	6	6	3	2
Remote printer	-	-	-	1	1	1	1	1	1	1	1
Mass storage (disk)*											

*Not computed at this time.

3.5.3 Office Furniture and Equipment

Offices and the conference room should be appropriately equipped with desks, chairs, tables, file cabinets, bookcases, blackboards, and telephones. At least two secretary/typist desks and chairs must be included. Two typewriters of IBM Selectric quality are required.

3.6 MANAGEMENT AND CONTROL

3.6.1 Management

The overall management of the SACS improved/on-line project will be based on a Project Master Plan (PMP) similar to that described in Appendix M, AR 18-1, "Management Information Systems - Policies, Objectives, Procedures, and Responsibilities." The development of the improved/on-line SACS is classified as a class A4--command-unique MIS operated at a single DPI. In this respect, Table 2-2, AR 18-1, identifies the following documents required for a class A4 system.

- Planning Phase
  - Include in the Army Management Information Systems (AMIS) Plan
- Phase I
  - General Functional Systems Requirement (GFSR)
  - Management Information Systems Economic Analysis (MISEA)
  - Organization and Personnel Plan (OPP)
  - Detailed Functional Systems Requirement (DFSR)
  - Project Master Plan (PMP)
- Phase II
  - ADPE Selection
  - ADP System Specifications
- Phase III
  - System Completion

Table 2-1, AR 18-1, explains the purpose of each of these documents.

The policies promulgated in AR 18-1 are currently under revision. These revisions tend toward compliance with DoD Standards such as DoD

7935.1-S, "Automated Data Systems Documentation Standards," 13 September 1977. This standard was promulgated and published under the authority of DoD Instruction 7935.1, "DoD Automated Documentation Standards," 13 September 1977.

DoD 7935.1-S identifies the following document types based on systems complexity:

- Phase I Definition
  - Functional Description
  - Data Requirements Document
- Phase II Design
  - System/Subsystem Specifications
  - Program Specifications
  - Data Base Specifications[1]
- Phase III Program
  - User's Manual (draft)
  - Computer Operations Manual (draft)
  - Program Maintenance Manual (draft)
  - Test Plan
- Phase IV Evaluation
  - Test Analysis Report
- Phase V Operation
  - User's Manual (final)
  - Computer Operations Manual (final)
  - Program Maintenance Manual (final)

The policies and documentation requirements of AR 18-1 and those of DoDI 7935.1 and DoD 7935.1-S provide different criteria and documentation requirements for ADP development projects. Very early in the continued development of this project, an Army decision is required concerning which published ADP documentation standard is to be followed. This decision will impact upon the detailed contents of the PMP and must

[1]May be combined with the Data Requirements Document.

be approved by the Assistant Chief of Staff for Automation and Communication (ACSAC).

3.6.1.1 Project Manager

The project manager (PM) will be responsible for ensuring the preparation of all documentation and software, that milestones are met, that all software programs are developed in accordance with the program specifications, that tests reflect compliance with specifications of the functional documentation, that thorough integration tests are run and evaluated, and the conversion and implementation of the system. The PM must be an experienced ADP professional who has successfully completed similar projects.

3.6.1.2 Management Review Briefings

The Systems Configuration Management and Control Group (SYCMACG)[1] will be the principal ARSTAF group to monitor the SACS development project. The SYCMACG Chairman must be a senior ODCSOPS(DAMO-FD) representative. A working group will be established to support the SYCMACG. Project progress briefings by the project manager should be held on a quarterly basis or as near to quarterly as possible. These quarterly briefings will be principally for the purpose of tracking progress and keeping SYCMACG members informed of SACS development events.

In addition to quarterly briefings, in-process review (IPR) briefings will be scheduled at specific milestones as indicated in the PMP, as required for decision purposes, or as required based upon events and circumstances of the developmental effort.

3.6.2 Control

The overall management of the development of the on-line SACS will be the responsibility of the SYCMACG. The control of the development of

[1] F. O. Deppner et al., Report of Task F, p. 13.

the on-line SACS is the responsibility of the PM. The milestones as stated in the PMP will be the overall schedule control; however, for internal project control, an overall hierarchical system diagram and activity/task control sheets will be utilized. Figure 3.2 shows a preliminary hierarchical diagram of the improved/on-line SACS. Appendix A reflects a more detailed breakdown of this diagram. Each entry on these figures represents the requirement for a module of software to be developed. A separate activity/task control form will be required to control each task and subtask. Though this control is oriented to software development, those activities or tasks that are related but have no direct software involvement will be similarly controlled. A sample activity/task form is given in Table 3.3.

3.6.2.1 Progress Review

At least once during each 2-week period, the PM will hold a project team progress review of all work scheduled for completion. This biweekly progress review will cover all aspects of the project to date with specific attention given to:

- On-schedule activities and tasks
- Behind-schedule activities and tasks
- Ahead-of-schedule activities and tasks
- Problems encountered

The review will result in shifting resources as required, determining reasons for problems and initiating action to resolve them, and a discussion of the activities and tasks scheduled for the subsequent 2-week period. In those instances where problems are beyond the scope of the PM, senior supervisory personnel and members of the SYCMACG will be advised of the problem and provided with recommended solutions. In instances where a work stoppage or other critical unforeseen event is about to occur, an immediate meeting of SYCMACG members will be called.

3.6.2.2 Day-to-Day Operations

The PM, senior analysts, and programmers will hold meetings on an as-required basis to ensure that day-to-day operations are consistent

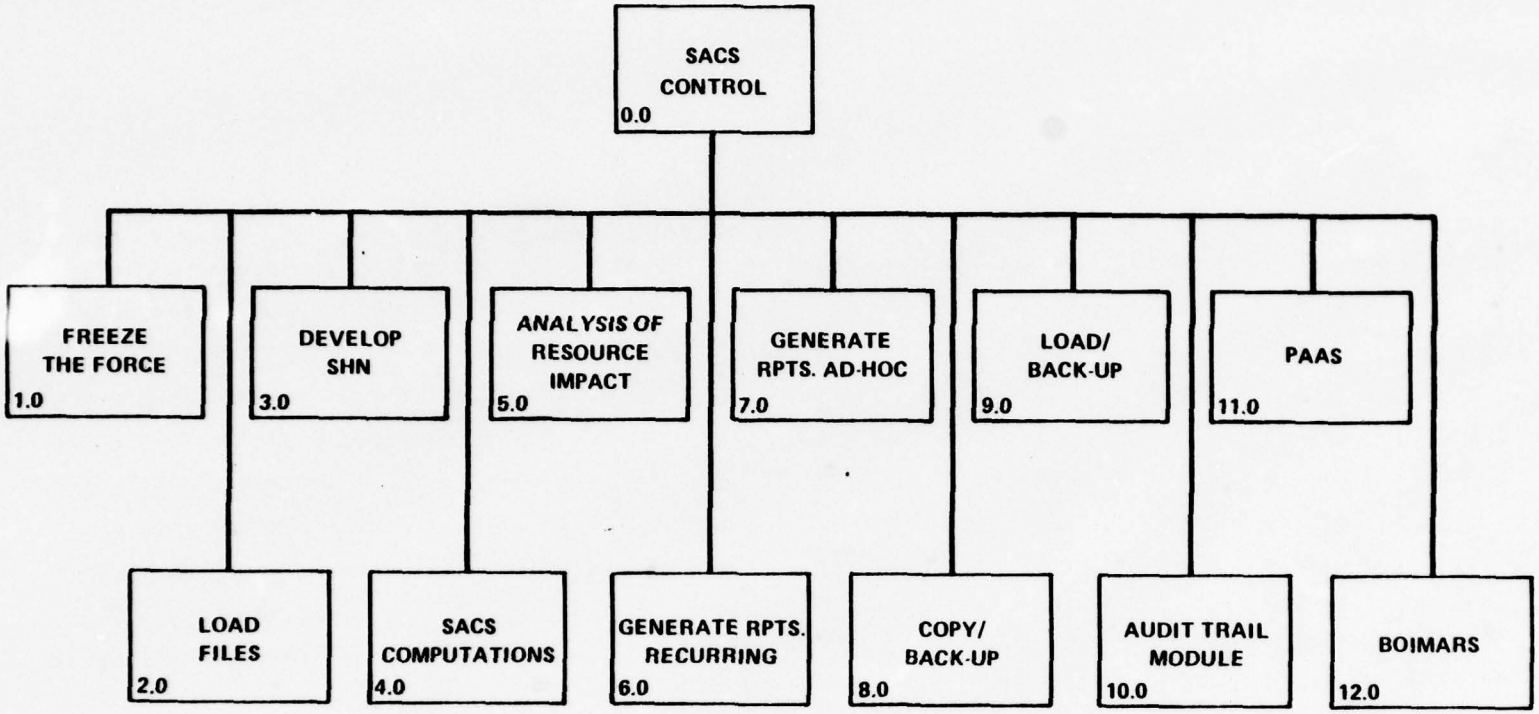


Figure 3.2. Program Module Hierarchy

TABLE 3.3

ACTIVITY/TASK CONTROL FORM (EXAMPLE ONLY)

Activity/Task/Subtask	Required Completion Date	Estimated Level of Effort	Estimated Start Date	Estimated Completion Date	Level of Effort	Start Date	Completion Date
4.0 SACS Computation	I* + 26 mo	11.5PM	I + 14.5	I + 26	16PM**	I + 14	I + 26
4.0.1 Functional Requirement	I + 18.5	4.0	I + 14.5	I + 18.5	6.0	I + 14	I + 18
4.0.2 Data Requirement	I + 19	0.5	I + 18.5	I + 19	1.0	I + 18	I + 19
4.0.3 System Design	I + 20	1.0	I + 19	I + 20	1.5	I + 19	I + 20
4.0.4 Program Specifications	I + 22	2.0	I + 20	I + 22	3.5	I + 20	I + 23
4.0.5 Code, Debug, Test	I + 26	4.0	I + 22	I + 26	4.0	I + 22	I + 26

*I = date of project initiation.

**The preparation of functional requirements, confirming data requirement, preparing system design. and program specifications required 4.5 person-months of effort more than planned. Change from 11.5PM to 16PM.

with plans and objectives. Specific attention will be given to ongoing tasks and new task start dates. Adjustments to work schedules will be based on the variable circumstances presented in day-to-day operations. Every effort will be made to ensure the project is maintained on schedule.

The day-to-day supervisory effort of the PM will be in a supportive role to functional and technical personnel to ensure that the technical aspects of implementing the improved/on-line SACS are developed according to approved criteria and in accordance with the allotted resources and scheduled time frame.

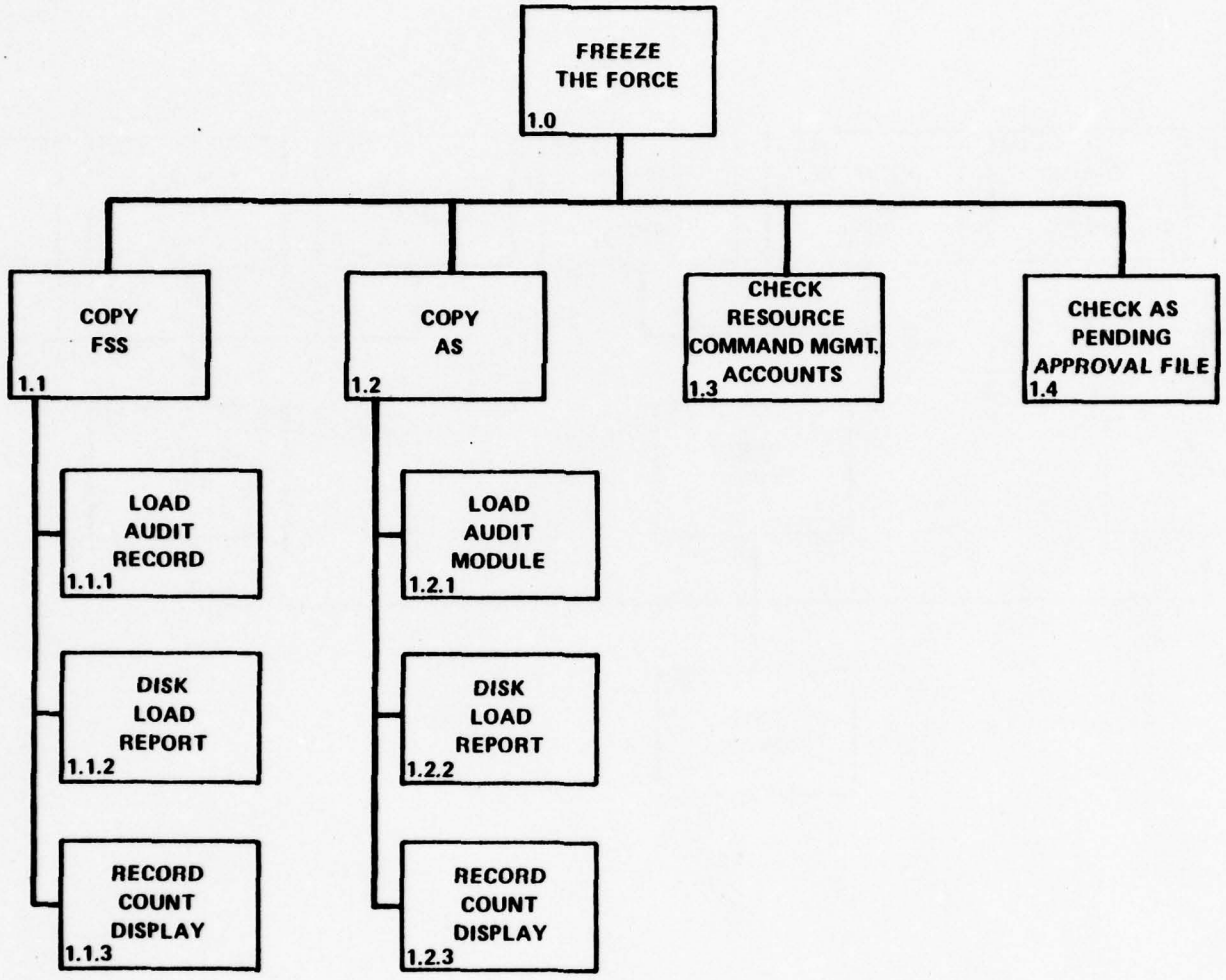
SECTION 4
RECOMMENDATIONS

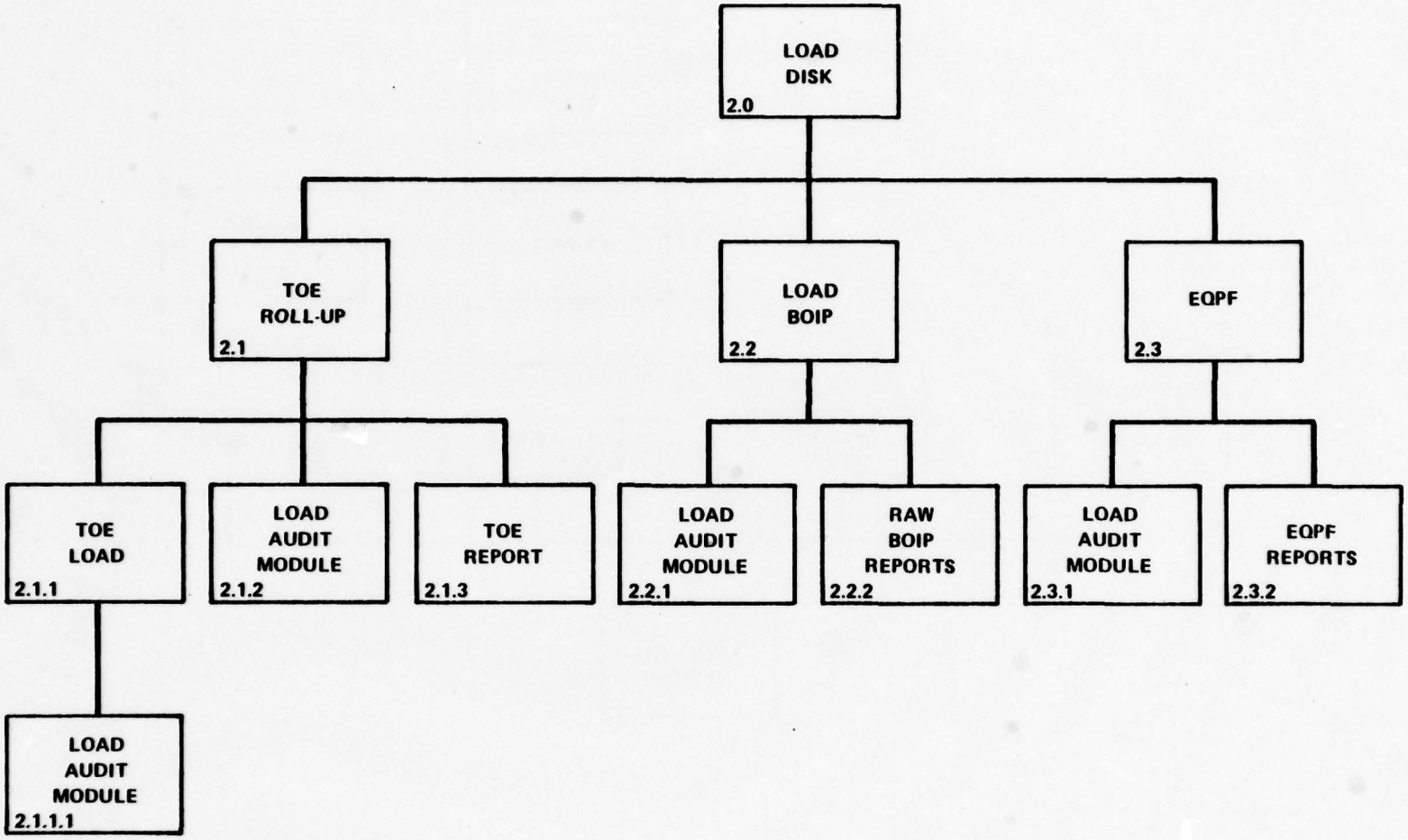
It is recommended that:

- ODCSOPS take action to budget resources to support the improved/on-line SACS development project.
- ODCSOPS take action to review AR 18-1 versus DoDI 7935.1 and DoD 7935.1-S documentation requirements with the ACSAC; and, if necessary, request a waiver to AR 18-1 documentation requirements so that the documentation advantages of the DoD concept can be realized.
- ODCSOPS initiate a project to implement the near- and long-term improvements identified herein.
- ODCSOPS initiate necessary action to develop directives to establish the SYCMACG.

APPENDIX A

DETAILED HIERARCHICAL DIAGRAM - ON-LINE SACS (PROPOSED)




LOAD
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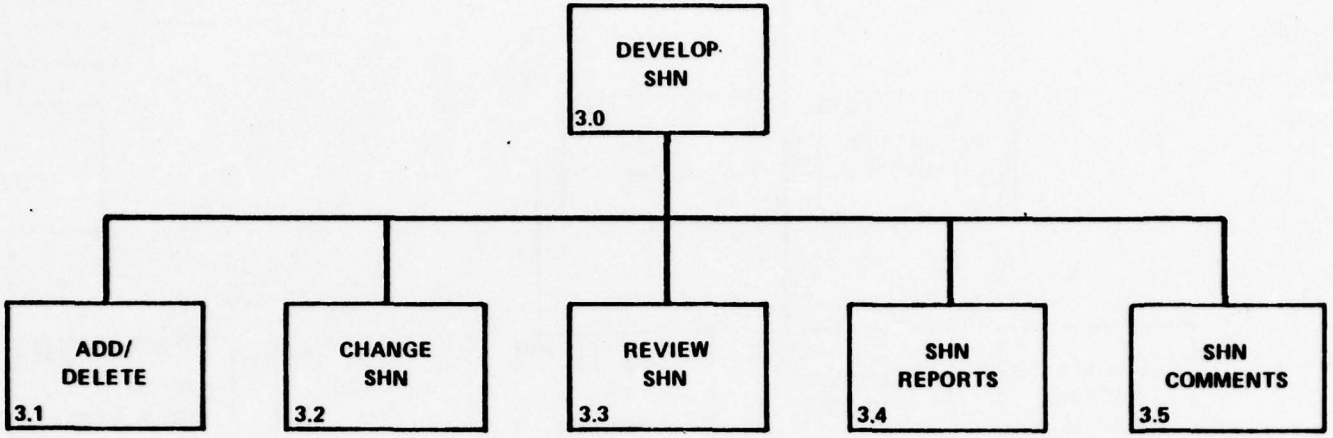
TOE
ROLL-UP
2.1
LOAD
BOIP
2.2
EQPF
2.3
TOE
LOAD
2.1.1
LOAD
AUDIT
MODULE
2.1.2
TOE
REPORT
2.1.3
LOAD
AUDIT
MODULE
2.2.1
RAW
BOIP
REPORTS
2.2.2
LOAD
AUDIT
MODULE
2.3.1
EQPF
REPORTS
2.3.2
LOAD
AUDIT
MODULE
2.1.1.1


DEVELOP SHN
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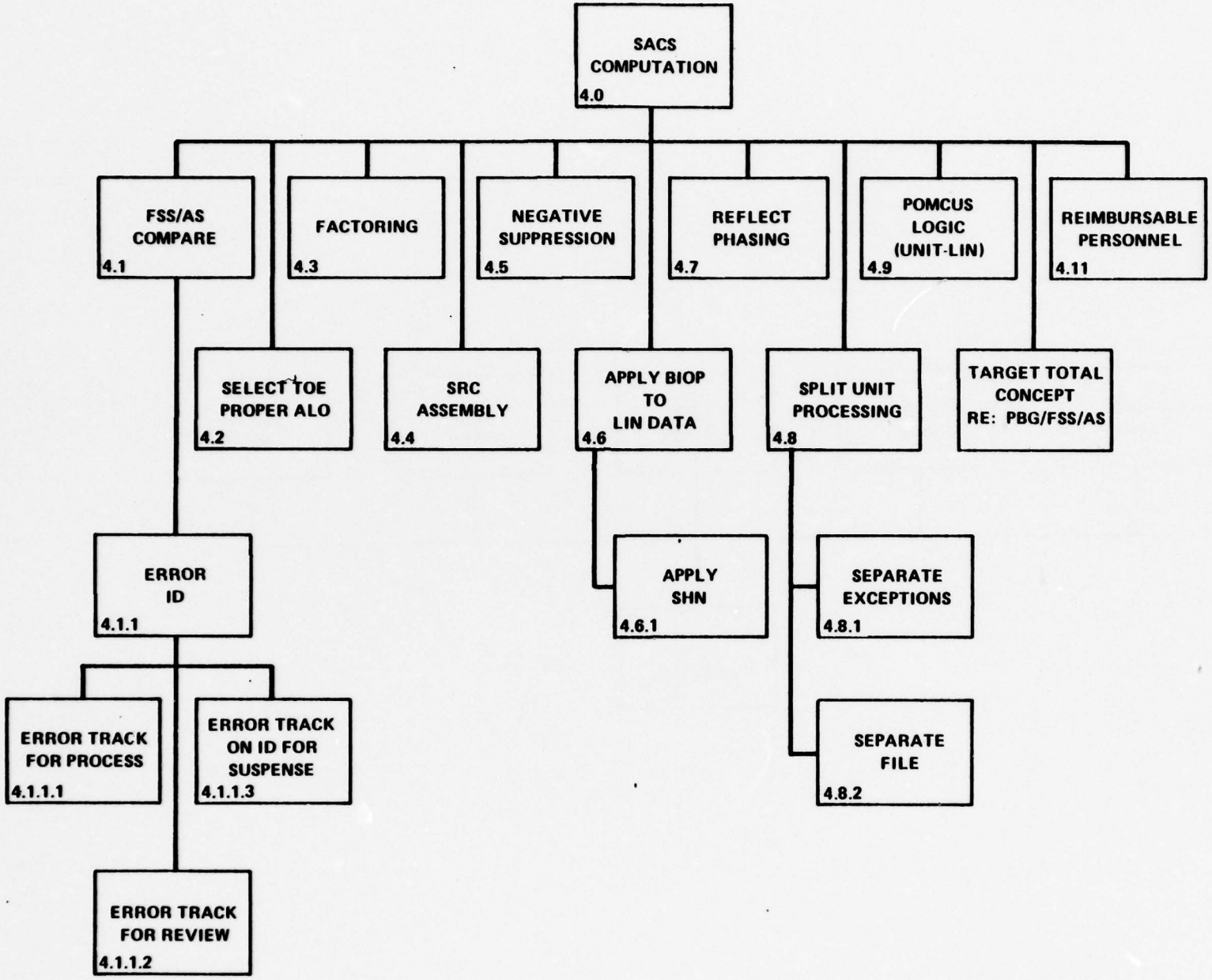
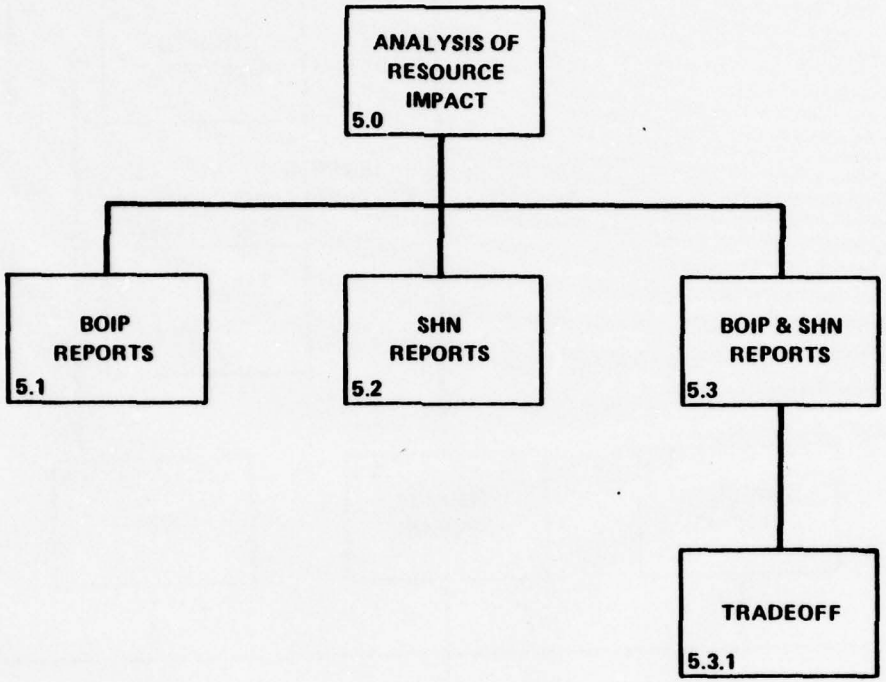
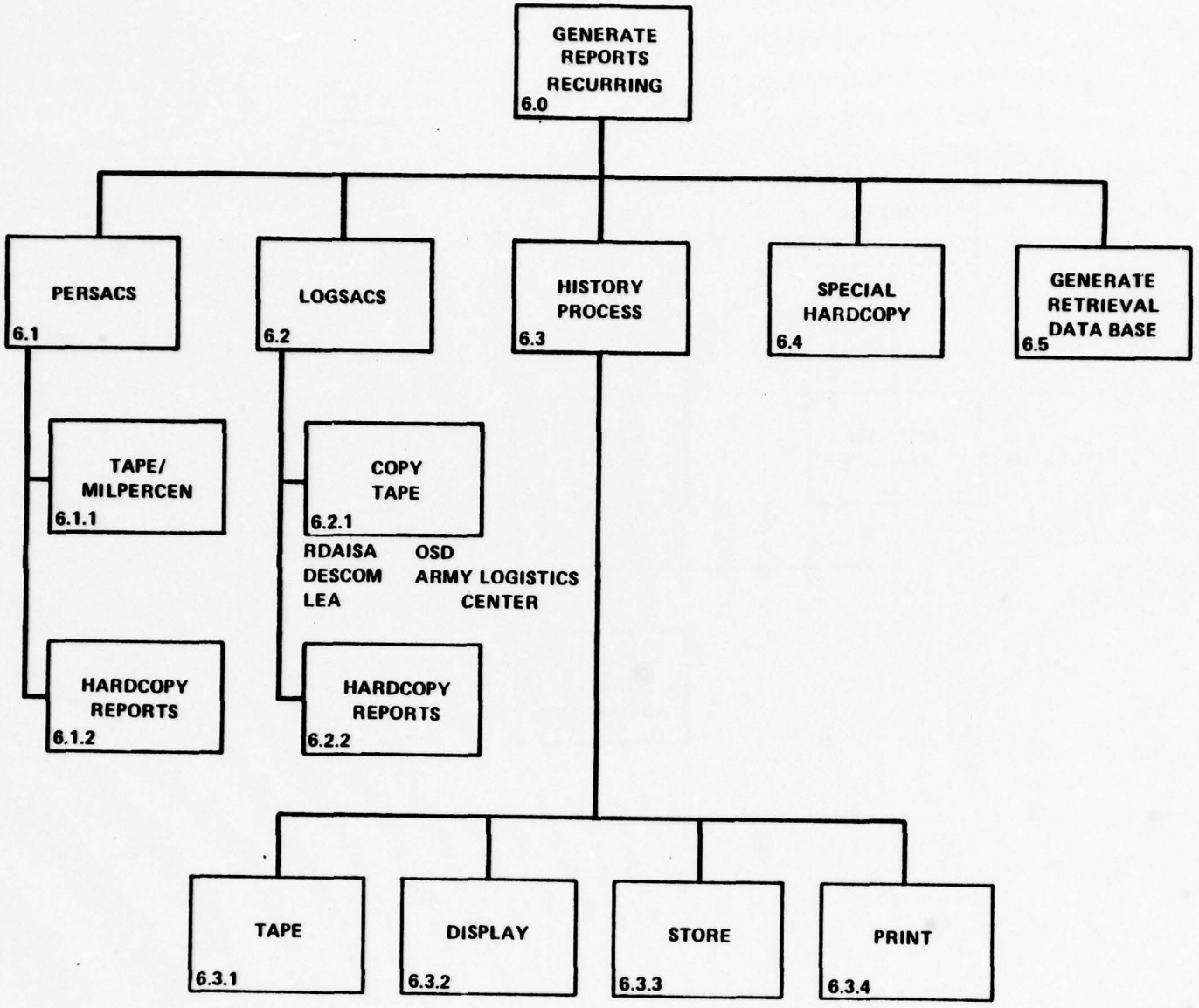
3.1
CHANGE SHN
3.2
REVIEW SHN
3.3
SHN REPORTS
3.4
SHN COMMENTS
3.5


SACS COMPUTATION 4.0
FSS/AS COMPARE 4.1
FACTORING 4.3
NEGATIVE SUPPRESSION 4.5
REFLECT PHASING 4.7
POMCUS LOGIC (UNIT-LIN) 4.9
REIMBURSABLE PERSONNEL 4.11
SELECT TOE PROPER ALO 4.2
SRC ASSEMBLY 4.4
APPLY BIOP TO LIN DATA 4.6
SPLIT UNIT PROCESSING 4.8
TARGET TOTAL CONCEPT RE: PBG/FSS/AS
ERROR ID 4.1.1
APPLY SHN 4.6.1
SEPARATE EXCEPTIONS 4.8.1
SEPARATE FILE 4.8.2
ERROR TRACK FOR PROCESS 4.1.1.1
ERROR TRACK ON ID FOR SUSPENSE 4.1.1.3
ERROR TRACK FOR REVIEW 4.1.1.2


ANALYSIS OF RESOURCE IMPACT
5.0
BOIP REPORTS
5.1
SHN REPORTS
5.2
BOIP & SHN REPORTS
5.3
TRADEOFF
5.3.1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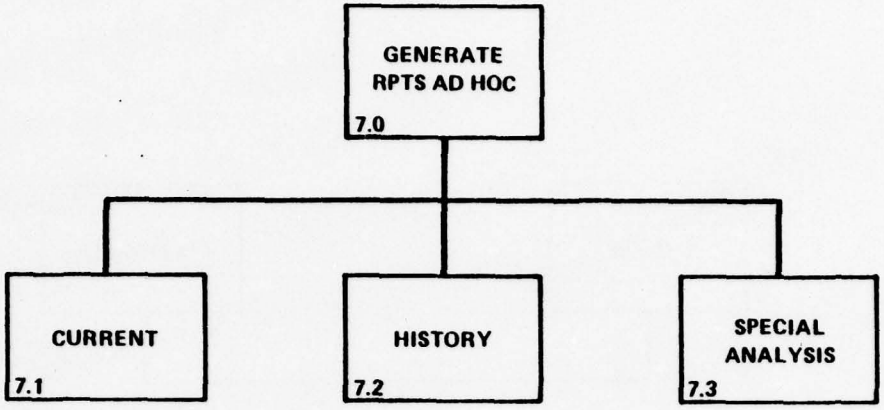
PERSACS
6.1
LOGSACS
6.2
HISTORY PROCESS
6.3
SPECIAL HARDCOPY
6.4
GENERATE RETRIEVAL DATA BASE
6.5
TAPE/ MILPERCEN
6.1.1
COPY TAPE
6.2.1
RDAISA
DESCOM
LEA
OSD
ARMY LOGISTICS CENTER
HARDCOPY REPORTS
6.1.2
HARDCOPY REPORTS
6.2.2
TAPE
6.3.1
DISPLAY
6.3.2
STORE
6.3.3
PRINT
6.3.4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HISTORY
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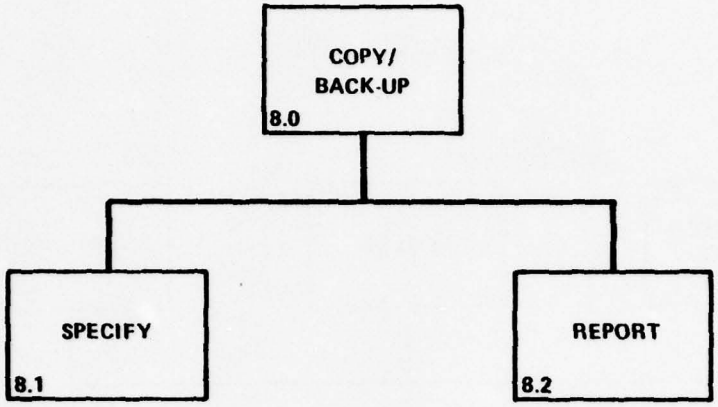
SPECIAL
ANALYSIS
7.3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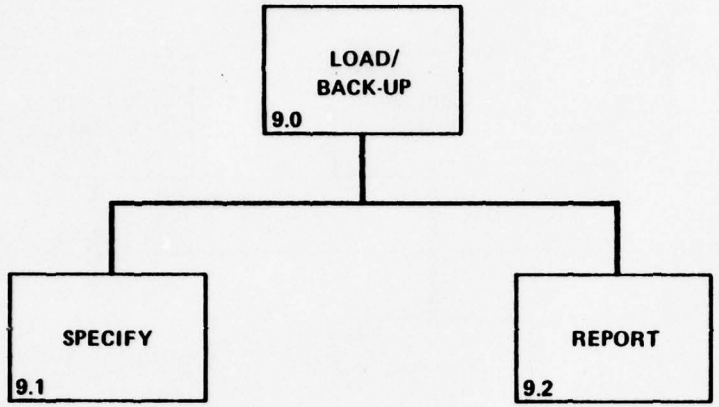
8.0
SPECIFY
8.1
REPORT
8.2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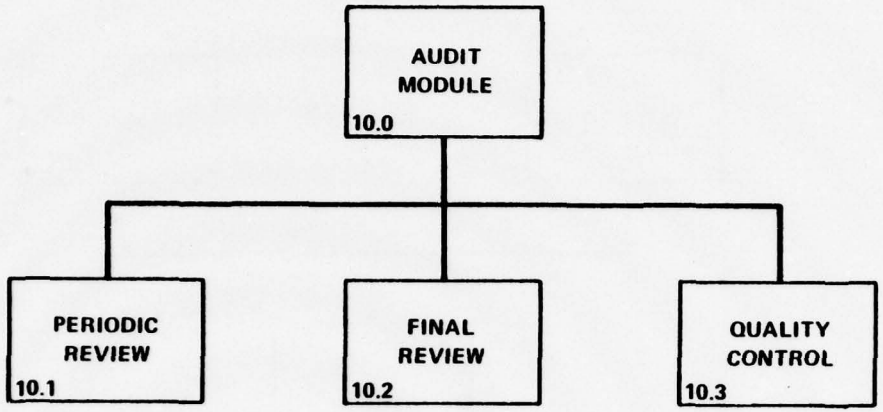
9.1
REPORT
9.2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MODULE
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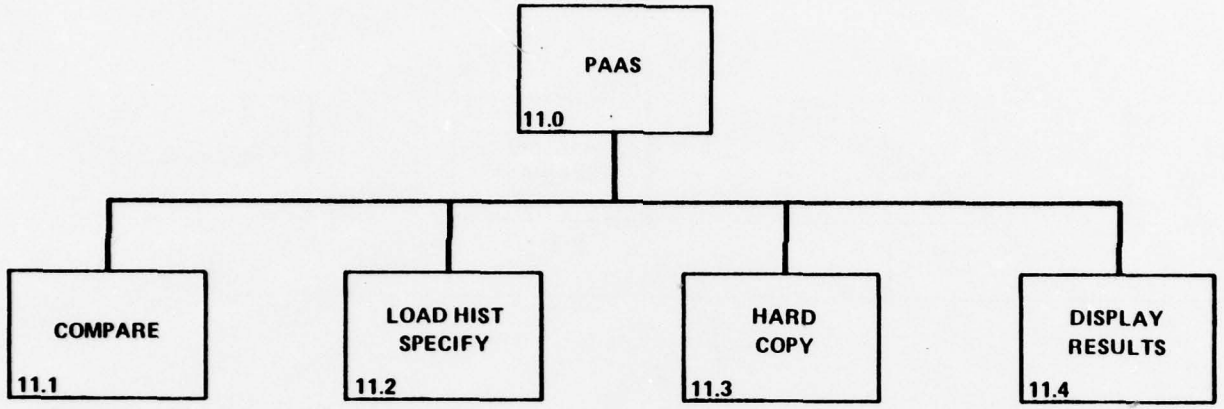
REVIEW
10.1
FINAL
REVIEW
10.2
QUALITY
CONTROL
10.3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11.1
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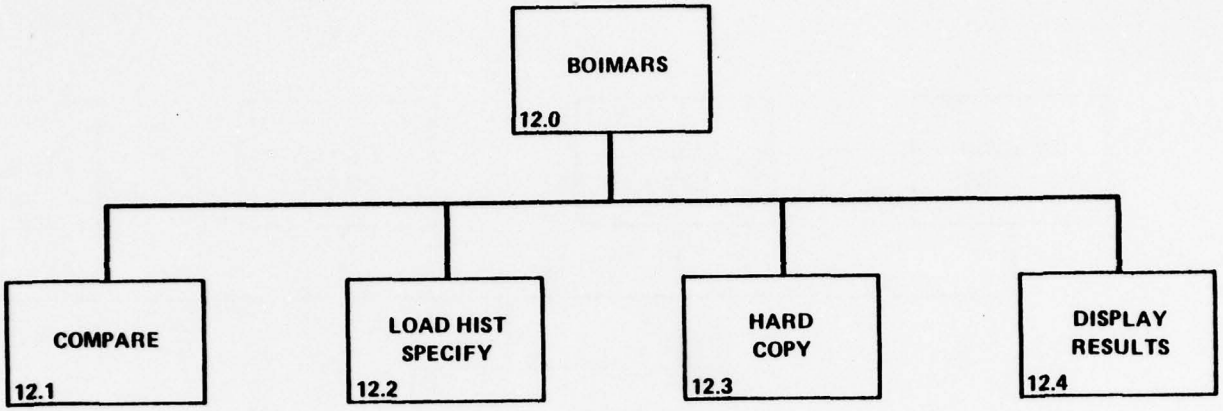
SPECIFY
11.2
HARD
COPY
11.3
DISPLAY
RESULTS
11.4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COMPARE
12.1
LOAD HIST SPECIFY
12.2
HARD COPY
12.3
DISPLAY RESULTS
12.4

APPENDIX B

NEAR-TERM AND LONG-TERM ACTIONS TO ACHIEVE THE IMPROVED/ON-LINE SACS

	Term	
	Near	Long
DATA MANAGEMENT (3.2)[1]		
Establish SYCMACG Organization and Draft Management Plan	X	
Implement SYCMACG Operating Policy and Draft Configuration Management Plan	X	
Implement Configuration Management	X	
Complete SACS Management Plan	X	
Evaluate Systems/Subsystem Specifications		X
Evaluate Software Design		X
Evaluate SACS Test Plan		X
Evaluate SACS Implementation Plan		X
Evaluate SACS Configuration		X
Update SACS Management Plan		X
Continue Managing SACS		X
EDATE RULES (3.4.1)		
Establish EDATE Rules Policy	X	
Implement Manual Control of EDATE Rules	X	
Complete EDATE Rules Specifications		X
Complete EDATE Rules Software Design		X
Complete EDATE Rules Programs		X
Implement EDATE Rules Capability in SACS Feeder Systems		X

[1]The numerical parenthetical entries refer to F. O. Deppner et al., Report of Task F, p. 13.

	Near	Long
DOCUMENTATION CHANGE RULES (3.4.2)		
Revise Existing Documentation Rules and Establish New Policy	X	
Manually Implement New Documentation Rules and Specifications	X	
Complete On-Line Documentation Rules Software Design		X
Complete On-Line Documentation Rules Programs		X
Implement On-Line Documentation Capability		X
EDITS (3.4.3)		
Establish Edit Rules Policy and Criteria	X	
Complete Edit Rules Specifications	X	
Complete Edit Rules Software Design		X
Complete Edit Rules Programs		X
Implement Edit Capability in SACS Feeder Systems		X
AUDIT (3.4.4)		
Establish SACS Audit Criteria and Policy	X	
Complete Audit Specification	X	
Complete Audit Software Design		X
Complete Audit Programs		X
Implement Audit Capability in On-Line SACS		X
DATA FLOW - FILE BALANCING (3.4.5)		
Establish Data Flow Policy and File Balancing Procedures for Force Sturcture Systems	X	
Implement Manual Data Flow Procedures	X	
Complete Data Flow and Data Balancing Specifications	X	
Complete Data Flow Control and Data Balancing Software Design		X

	Near	Long
Complete Data Flow and Data Balancing Programs		X
Implement Data Flow Control and Data Balancing Procedures in Force Structure Systems		X
SACS INITIATION (3.4.6)		
Establish SACS Initiation Policy	X	
Complete SACS Initiation Specifications	X	
Interface SACS Initiation Specifications with SACS Processing Specifications	X	
ON-LINE SACS PROCESSING (3.4.7)		
Complete Modification of SIGMA to SACS Processing Specifications	X	
Complete SACS Processing Software Design		X
Complete SACS Processing Programs		X
Implement On-Line SACS Initiation and SACS Processing		X
BASIS OF ISSUE PLAN (BOIP) FILE (3.4.8)		
Evaluate TRADOC Capability to Prepare Up-to-Date File	X	
Implement New TRADOC BOIP File	X	
Establish BOIP Resource Impact Processing Criteria	X	
Complete BOIP Resource Impact Processing Specifications		X
Complete BOIP Resource Impact Processing Software Design		X
Complete BOIP Resource Impact Processing Programs		X
Implement On-Line BOIP Resource Impact Capability		X

	Near	Long
TABLE OF ORGANIZATION AND EQUIPMENT (TOE) FILE (3.4.9)		
Evaluate TRADOC Capability to Prepare TOE Computational File	X	
Complete New TOE Computational File Availability	X	
Implement New TOE Computational File Capability		X
SHORT HAND NOTES (SHN) (3.4.10)		
Evaluate LOGSACS SHN Capability for Improvements and PERSACS SHN Requirements	X	
Complete Improved LOGSACS SHN Processing Specifications	X	
Complete Improved PERSACS SHN Processing Specifications	X	
Complete On-Line LOGSACS SHN Software Design		X
Complete On-Line PERSACS SHN Software Design		X
Complete On-Line LOGSACS SHN Programs		X
Complete On-Line PERSACS SHN Programs		X
Implement On-Line SHN Capability		X
PHASING (3.4.11)		
Complete EQPF Specifications	X	
Complete EQPF Software Design		X
Complete EQPF Programs		X
Implement EQPF Capability		X
IDENTIFICATION OF REIMBURSABLE PERSONNEL AUTHORIZATIONS (3.4.12)		
Evaluate Impact of Adding Reimbursable Personnel Spaces to AMS and PBG	X	

	Near	Long
Complete Reimbursable Personnel Spaces Specification	X	
Implement Identification of Reimbursable Spaces into TAADS Detail Records		X
MONITOR TDA AUGMENTATION UNITS (3.4.13)		
Complete TDA Augmentation Specification	X	
Implement Manual TDA Augmentation Capability	X	
Implement On-Line TDA Augmentation Review Capability		X
INPUT DETAIL DATA AT HQDA (3.3.14)		
Establish Top Load Criteria	X	
Implement Manual Top Load Capability	X	
Complete On-Line Top Load Software Design		X
Complete On-Line Top Load Programs		X
Implement On-Line Top Load Capability		X
TAADS DOCUMENT REVIEW (3.4.15)		
Establish TAADS Document Review Organization, Criteria and Plan	X	
Complete TAADS Document Review Specifications	X	
Implement Manual TAADS Documentation Review Capability	X	
Complete TAADS Documentation Review Software Design		X
Complete TAADS Documentation Review Programs		X
Implement On-Line TAADS Documentation Review Capability		X
LOGSACS AND PERSACS DATA BASE (3.4.16)		
Complete SACS Data Base Specifications		X
Complete SACS Data Base Design		X
Implement SACS Data Base		X

	Near	Long
SACS HISTORY (3.4.17)		
Complete SACS History Specifications		X
Complete SACS History Software Design		X
Complete SACS History Programs		X
Implement SACS History Capability		X
SACS DOCUMENTATION (3.4.18)		
Complete Audit of Current Available SACS Documentation	X	
Complete Baselining of SACS Documentation	X	
Complete Update of SACS Documentation		X
Complete Update of SACS Documentation		X
Review and Implement SACS Documentation Maintenance		X
DEVELOP CHANGES TO DATA ELEMENTS (3.4.19)		
Complete SACS Data Element Revisions	X	
Complete SACS Data Element Directory Baseline	X	
Complete SACS Data Element Update		X
Implement SACS Data Element Standards		X
DATA SYNCHRONIZATION (3.4.20)		
Complete Data Synchronization Requirements	X	
Complete Identification of Control Data Elements		X
Complete Data Synchronization Specifications		X
Complete Data Synchronization Software Design		X
Complete Data Synchronization Programs		X
Implement Data Synchronization Capability in All Force Structure and Other Affected Systems		X

	Near	Long
UPGRADE PAAS AND BOIMARS (3.4.21)		
Complete PAAS and BOIMARS Upgrade Specification		X
Complete PAAS and BOIMARS Software Design		X
Complete PAAS and BOIMARS Programs		X
Implement PAAS and BOIMARS On-Line Capability		X
ESTABLISH A SACS DATA BASE BACK-UP AND RESTORE CAPABILITY (3.4.22)		
Evaluate System Back-Up/Restore Requirements	X	
Complete System Back-Up/Restore Specifications		X
Complete System Back-Up/Restore Software Design		X
Complete System Back-Up/Restore Programs		X
Implement System Back-Up/Restore Capability		X
REVISE THE DAMO-FD ORGANIZATIONAL STRUCUTRE (3.4.23)		
Identify Required Organizational Changes to Include Procedures	X	
Implement Organizational Changes to Include Procedures	X	
Review and Evaluation of Organization and Staff Procedures for Potential Development of Improved Software		X

APPENDIX C

SACS IMPROVEMENTS - NEAR-TERM

1. Improvement Identification: Data Management

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix F
   b. Report of Task D, paragraph 2.3.k
   c. Report of Task E, paragraph 2.3.12
   d. Report of Task F, paragraph 3.2

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Manpower requirements and authorizations management
      Computations of equipment and personnel requirements
      Distribution of equipment and personnel
   b. Systems:
      FORDIMS (VFDMIS)
      SACS
      VTAADS
      ITAADS
      TOE
      BOIP
      LIN
      MOS
      AAO (RDAISA)
      TAEDP and PEM (DESCOM)
      Others as applicable

5. Description of Required Action: To accomplish the near-term Data Management improvements, the following subtasks must be accomplished:
   a. Establish the Systems Configuration Management and Control Group (SYCMACG) organization and draft the management plan. This requires:

- Prepare, staff, and publish a Chief of Staff Memorandum (CSM) authorizing the establishment of the SYCMACG and task the ARSTAF and field activities to designate their representatives.
- Develop, staff, and publish in a Chief of Staff Regulation (CSR) the SYCMACG Management Plan delineating its scope, objectives, organizational structure, responsibilities, and duties.
- Develop, staff, and publish a CSR covering SACS scope, responsibilities, uses, etc.

b. Implement the force structure operating policy and the draft configuration management plan through the publication and distribution of a procedures manual which will specify the policies and procedures for effecting changes in all of the SACS feeder systems.

c. Implement configuration management through the use of procedures as outlined in Chapter 7, AR 18-1, which will be applicable to all force structure systems to include SACS and SACS feeder systems.

d. Complete the SACS management plan. This plan will delineate the policies and procedures under which the SACS will be managed by the Army. Included will be the process to be followed in the resolution of all SACS management data and operational problems. The SYCMACG will be responsible for the operational control of SACS. The configuration management plan will be an annex to the SACS management plan.

1. Improvement Identification: EDATE Rules

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 2, Section 5, and Appendix A
   b. Report of Task D, paragraph 2.3.c
   c. Report of Task E, paragraph 2.3.1 and 2.3.3
   d. Report of Task F, paragraph 3.4.1

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Unit documentation
      Manpower strengths and equipment requirements
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      LIN
      MOS
      Others as applicable

5. Description of Required Action: To accomplish the near-term EDATE rules improvements, the following subtasks must be accomplished:
   a. Formulate, staff, and publish in an appropriate document the EDATE rules policy that will be applicable to ARSTAF, MACOM, and agencies that input changes to a force structure system that impacts on resource requirements and authorizations.
   b. Implement a manual control system by formulating and publishing decision rules for EDATE changes. (These same decision rules will be implemented in automated systems as a long-term action.)

1. Improvement Identification: Documentation Change Rules

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix A
   b. Report of Task D, paragraph 2.3.d
   c. Report of Task E, paragraph 2.3.4
   d. Report of Task F, paragraph 3.4.2

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Unit configuration
      Manpower strengths and equipment requirements
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      Others as applicable

5. Description of Required Action: To accomplish the near-term Documentation Change Rules improvement, the following subtasks must be completed:
   a. Formulate, staff, and publish revisions to the existing documentation rules.
   b. The manual implementation of new documentation rules and specification will cover:
      - When documentation can be changed.
      - Restrictions applicable to changing documentation.

1. Improvement Identification: Edit Rules

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix B
   b. Report of Task D, paragraph 2.3.e
   c. Report of Task E, paragraph 2.3.5
   d. Report of Task F, paragraph 3.4.3

4. Functional Area and/or System of Impact:
   a. Functional Area: Potentially all areas of force structure systems that feed data to SACS or receive data from SACS will be impacted
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      BOIP
      SHN
      EQPF
      Others as applicable

5. Description of Required Action: The formulation of the near-term Edit Rules improvement requires the following subtasks to be accomplished:
   a. Develop, staff, and publish, in appropriate documents, edit policies and rules which clearly identify those data elements which have relationship and compatibility with other data elements and the procedures to be followed to ensure that the data values are accurate and supportive of each other.
   b. The edit rules specifications must clearly state that:
      - Edit tables and files are accurately maintained.
      - All data elements are edited at point and time of input into respective systems.
      - Edit values, standards, and logic will apply equally to all force structure systems.

1. Improvement Identification: Audit Rules

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix C
   b. Report of Task D, paragraph 2.3.f
   c. Report of Task E, paragraph 2.3.6
   d. Report of Task F, paragraph 3.4.4

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      UIC controls
      Unit header, personnel, and logistics detail record control
   b. Systems:
      FORDIMS (VFDMIS)
      UIS
      SACS
      Others as applicable

5. Description of Required Action: The formulation of the near-term Audit Rules improvement requires the following subtasks to be accomplished:
   a. Formulate and publish in the SACS procedures manual audit policies and rules that will ensure all units and their applicable detail records are included in SACS outputs.
   b. Specifically, these rules will address the following:
      - Requirements to ensure that registered UICs with manpower and/or equipment are reflected in all force structure systems.
      - Specific time standards for MACOMs to include registered UICs in the TAADS submission.
      - UICs in the FSS to reflect type of detail required (personnel and/or equipment).

- Analysis of SACS record counts to ensure the input and output are equal and if not to specify what action is required to reconcile differences.

1. Improvement Identification: Data Flow-File Balancing

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix F
   b. Report of Task D, paragraph 2.3.g
   c. Report of Task E, paragraph 2.3.7
   d. Report of Task F, paragraph 3.5

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Allocation of manpower
      Management of manpower authorizations
      Manpower guidance tracking procedure
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      SACS

5. Description of Required Action: The formulation of the near-term Data Flow Rules and File Balancing improvement requires the following subtasks to be accomplished:
   a. Formulate, staff, and publish in an appropriate document the data flow rules that will ensure unconstrained flow of data between HQDA and MACOMs and MACOMs and HQDA.
   b. Establish definite response time standards which must be adhered to by force and command managers and MACOMs when approving or complying with approved guidance through submission of command plans, approval of command plans, and submission of TAADS documentation.
   c. Establish procedures which will specify periodic stops (cut-off) in data flow between HQDA and MACOMs and vice versa for the purpose of balancing the force structure data base(s).

1. Improvement Identification: SACS Initiation

2. Time Frame: Near-term

3. References:
   a. Report of Task D, paragraph 2.4.b
   b. Report of Task E, paragraph 2.4.3
   c. Report of Task F, paragraph 3.4.6

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Inputting SACS run parameters
      Freezing the force
   b. Systems:
      SACS
      SIGMA

5. Description of Required Action: The implementation of the near-term SACS initiation improvement requires the following subtasks to be accomplished:
   a. Establish and document a policy for the use of FICOD "F" and "P" in SACS processing and provide for SACS initiation to freeze the force and all required files via on-line terminal operations to include inputting the parameters for selecting the force.
   b. Establish a procedure to ensure that unresolved data in the resource command management accounts and the AS data pending approval files are reviewed by a DAMO-FD analyst to determine the age of unresolved data and initiate action to resolve those data which are older than XX days.
   c. Establish procedures for loading the TOE file to disk and checking to assure that it has been aggregated to parent unit level.
   d. Establish the basic audit control totals which all subsequent record courts must balance against.

1. Improvement Identification: Improved SACS Processing

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 3.4.5
   b. Report of Task D, paragraph 2.4.b
   c. Report of Task E, paragraph 2.4.3
   d. Report of Task F, paragraph 3.4.7

4. Functional Area and/or System of Impact:
   a. Functional Area: None
   b. Systems:
      SACS
      SIGMA
      PERSACS
      LOGSACS

5. Description of Required Action: The establishment of the near-term Improved SACS Processing improvement will require the following subtasks to be accomplished:
   a. Document the upgrading of the current SIGMA procedures to incorporate the new SACS initiation policy and the new SACS processing.
   b. Establish the SACS functional requirements for on-line processing from the SACS control module through all of the SACS functions.

1. Improvement Identification: Basis of Issue Plans (BOIP) File

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 3.5.5 and Appendix E
   b. Report of Task D, paragraph 2.3.h
   c. Report of Task E, paragraph 2.3.9
   d. Report of Task F, paragraph 3.4.8

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Manpower and equipment requirements
      Resource impact analysis
      Phasing
   b. Systems:
      LOGSACS
      PERSACS[1]
      Resource impact analysis
      BOIP
      PEM

5. Description of Required Action: Implementation of the near-term BOIP file improvement will require the following subtasks be accomplished:
   a. Ensure that TRADOC will maintain the BOIP in an up-to-date status.
   b. Verify that the TRADOC BOIP file contains all BOIP as maintained by the HQDA BOIP file.
   c. Establish procedures for processing the BOIP file at TRADOC and its use at HQDA that will encompass the following:
      - TRADOC's coordination with the applicable HQDA activity to ensure that all changes, updates, revisions, or additions

[1]The application of BOIP in PERSACS is presumed to be an ODCSPER responsibility; its application to PERSACS is not provided for herein.

have been incorporated into the BOIP file prior to submitting it to HQDA.

- Formulate specifications for BOIP impact displays for use by ARSTAF analysts.
- Provide for a BOIP control file which would be used for identifying the type of processing actions required.

1. Improvement Identification: Table of Organization and Equipment (TOE) File

2. Time-Frame: Near-term

3. References:
   a. Report of Task D, paragraph 3.3.1
   b. Report of Task E, paragraph 2.3.8
   c. Report of Task F, paragraph 3.4.9

4. Functional Area and/or System Impact:
   a. Functional Area: None
   b. Systems:
      SACS
      TOE

5. Description of Required Action: Implementation of the near-term TOE file improvement will require the following subtasks be accomplished:
   a. Promulgate, staff, and publish requirements for TRADOC to maintain the TOE file in an up-to-date status.
   b. Ensure procedures require that additions, changes, and revisions to MOS and LIN files are posted in a timely manner.
   c. The TOE file must be aggregated to parent unit level prior to submission to HQDA. This file will then be used in lieu of the TOE computational file. No HQDA updating will be required.

1. Improvement Identification: Short Hand Notes

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix E
   b. Report of Task D, paragraph 2.4
   c. Report of Task E, paragraphs 2.4.1, 2.4.2, and 2.4.3
   d. Report of Task F, paragraph 3.4.10

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      SACS data establishment
      SACS data modification
   b. Systems:
      LOGSACS
      PERSACS
      SHN

5. Description of Required Action: Implementation of the near-term Short Hand Notes (SHN) improvement will require the following subtasks be accomplished:
   a. Determine the requirement for upgrading the SHN process with the objective of using it to modify, change, or revise LOGSACS.[1]
   b. Develop improved SHN processing specifications to include:
      - Use of a terminal to input and change, add, or delete, the SHN records.
      - SHN file data will accommodate one-time and multi-use records for application to UIC or SRC.
      - Separate SHN systems will be required for LOGSACS and PERSACS.[1]
      - Capability to add all of the missing LIN or MOS and grade detail records for a complete unit.

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[1]The application of SHN in PERSACS is assumed to be an ODCSPER responsibility; its development and application to PERSACS is not provided for herein.

1. Improvement Identification: Phasing

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix A
   b. Report of Task B, paragraph 3.3.1
   c. Report of Task E, paragraph 2.4.1
   d. Report of Task F, paragraph 3.4.11

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Management of manpower and equipment requirements
      Distribution of manpower and equipment
   b. Systems:
      LOGSACS
      PERSACS
      BOIP
      EQPF

5. Description of Required Action: Implementation of the near-term phasing improvement will require the following subtasks be accomplished:
   a. Document the requirements for the establishment and application of the Equipment Phasing File (EQPF).
   b. The EQPF specifications must include:
      - DESCOM's role in periodically creating the EQPF.
      - Procedures to be applied by ODCSPER for phasing personnel requirements to coincide with equipment availability.[1]
      - Procedures to be applied by ODCSOPS to project equipment availability so as to coincide with UIC EDATEs.

[1]Since it is assumed that personnel phasing is an ODCSPER responsibility, it will not be addressed in SACS development.

- Procedures to provide for periodic review of EQPF by command and force managers to determine conflict between force structure EDATE and resource availability.

1. Improvement Identification: Identification of Reimbursable Personnel Authorizations

2. Time Frame: Near-term

3. References: Report of Task F, paragraph 3.4.12

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Manpower accountability
      Army management structure
      Program budget guidance
   b. System: None

5. Description of Required Action: Implementation of near-term procedures for Identification of Reimbursable Personnel Authorizations improvement will require the following subtasks be accomplished:
   a. Implementation of FYDP PE 91519A in the Army Management Structure (AMS) and implementation of the assigned AMSCO in allocating reimbursable manpower in the Program Budget Guidance (PBG).
   b. Specifications must be developed that will:
      - Establish an AMSCO to accommodate reimbursable manpower authorization.
      - Modify AR 37-100-XX to include the new AMSCO with appropriate instructions for its application.
      - Advise ODCSPER to utilize the new AMSCO in allocating reimbursable manpower and advise the MACOMs to realign their VTAADS documents to incorporate the new AMSCO for reimbursable personnel authorizations.

1. Improvement Identification: Monitor TDA Augmentation Units

2. Time Frame: Near-term

3. References: Report of Task F, paragraph 3.4.13

4. Functional Area and/or System Impact:
   a. Functional Area: Force structure
   b. System: FORDIMS (VFDMIS)

5. Description of Required Action: Implementation of near-term procedures to monitor TDA augmentation units improvement will require the following subtasks be accomplished:
   a. Establish specifications to ensure that TDA augmentation units are in synchronization with the parent unit.
   b. Coordinate the specifications with USAMSSA for implementation in FORDIMS FSS.

1. Improvement Identification: Input of Detail Data at HQDA

2. Time Frame: Near-term

3. References:
   a. Report of Task C, Appendix I
   b. Report of Task F, paragraph 3.4.14

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Manpower and equipment management, distribution and accountability
   b. Systems:
      FORDIMS AS (VFDMIS)
      VTAADS
      ITAADS

5. Description of Required Action: Implementation of near-term procedures to input of detail data at HQDA requires the accomplishment of the following subtasks:
   a. Prepare, staff, and publish appropriate criteria which will delineate circumstances under which detail data will be "top loaded" into the Authorizations Subsystem of FORDIMS at HQDA.
   b. Procedures to be followed in implementing this capability must include:
      - Specific rules covering MACOM response time requirements to approved guidance. (To be made a part of the guidance tracking procedure.)
      - Specific rules for inputting data when MACOMs fail to meet established response times.
      - Specific rules for advising the MACOMs of the action taken.
      - The circumstances under which the top loading feature would be applied in lieu of application of the SHN.

1. Improvement Identification: TAADS Documents Review (Section II Personnel)

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 3.5.6 and Appendix G
   b. Report of Task F, paragraph 3.4.15

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower requirements and authorizations management
   b. System: None

5. Description of Required Action: Establishment of the near-term TAADS Document Review (Section II Personnel) will require the following subtasks be accomplished:
   a. Establish the methodology for reviewing the personnel (section II, TAADS) data to ensure compliance with guidance of AR 611-101, AR 611-201, and others as applicable.
   b. Assign specific review responsibilities to an office or field activity.

1. Improvement Identification: SACS Documentation

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 7, Section 5, and Appendix A
   b. Report of Task D, paragraph 2.4
   c. Report of Task E, paragraph 3.2
   d. Report of Task F, paragraph 3.4.18

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower and equipment requirements and authorizations management
   b. Systems:
      FORDIMS (VFDMIS)
      SACS
      VTAADS
      ITAADS
      TOE
      BOIP
      SHN
      EQPF
      Others as applicable

5. Description of Required Action: Establishment of near-term SACS documentation will require the following subtasks be accomplished:
   a. Review of all the documentation that currently exists that has any influence on SACS products or describes SACS.
   b. Develop, staff, and publish SACS documentation as follows:
      - A "Data Element Directory" that will identify every data element available for use in SACS. This directory must also include the complete make-up of the elements and instructions for their use.

- A "SACS Functional User's Guide" which provides detailed information to the users of the various SACS products; what force structure systems provide the data; how the data received is processed prior to inputting into SACS; and what actions are to be taken by the users in the event of errors or omissions.
- A "SACS Systems and Procedures Manual" for use by the SACS branch personnel as well as all personnel who are responsible for programming data that are ultimately used in the make up of the SACS products. This manual must provide detailed guidance on how the SACS system operates from SACS initiation through SACS history. This will require constructing flow charts depicting the force structure feeder systems and other products (MOS file and SB 700-20) that impact the feeder system. In addition, detailed instructions must be included for analyzing data received to assure their accuracy prior to letting the data flow into SACS.
- A SACS training and orientation program must be established that will involve not only personnel in the SACS branch but all personnel that use SACS products, as well as those who provide data to the force structure systems that feed data to SACS. This program must clearly identify what SACS products are used for; the importance of accurate and timely feeder data; and most of all the serious consequences that can result from the use of incorrect data in SACS.

1. Improvement Identification: Develop Changes to Existing Data Elements

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 3.5.6
   b. Report of Task D, Section 3 and Appendix A
   c. Report of Task E, paragraph 2.4.1 and 3.1
   d. Report of Task F, paragraph 3.4.19

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Manpower and equipment requirements and authorizations management
   b. Systems:
      FORDIMS (VFDMIS)
      SACS
      VTAADS
      ITAADS
      TOE
      BOIP
      EQPF
      SHN

5. Description of Required Action: The near-term procedures to develop controls over data element changes will require the following subtasks be accomplished:
   a. Develop procedures that will ensure that any changes being considered for implementation in data elements in SACS feeder systems will be approved by SYCMACG.
   b. The new procedures must provide for periodic review of all data elements in the Data Element Directory to ensure currency, need, and accuracy of data values.
   c. Procedures must be established for adding, changing, deleting, or revising data elements within the configuration management plan.

1. Improvement Identification: Data Synchronization

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraphs 3.4.1 and 3.5.6 and Appendix F
   b. Report of Task D, paragraphs 2.2 and 2.3
   c. Report of Task E, paragraphs 2.3.12 and 2.4.1
   d. Report of Task F, paragraph 3.4.20

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower and equipment requirements and authorizations management
   b. Systems:
      FORDIMS (VFDMIS)
      UIS
      VTAADS
      ITAADS
      TOE
      BOIP
      SHN
      EQPF
      SACS

5. Description of Required Action: The establishment of the near-term data synchronization improvement will require that ODCSOPS develop, staff, and publish a coordinated schedule for updating all of the various SACS feeder files. The schedule will be designed to ensure that changes are implemented in all systems on the same schedule so that records in all interfacing systems will match.

1. Improvement Identification: Establish a SACS Data Base Back-Up and Restore Capability

2. Time Frame: Near-term

3. References: Report of Task F, paragraph 3.4.22

4. Functional Area and/or System Impact:
   a. Functional Area: None
   b. System: None

5. Description of Required Action: To establish a SACS data base back-up and restore capability, action will be required to establish software to copy the SACS data periodically and provide for their restoration on an as-required basis for contingency purposes.

1. Improvement Identification: Revise the DAMO-FD Organizational Structure

2. Time Frame: Near-term

3. References:
   a. Report of Task C, paragraph 3.5.6
   b. Report of Task E, paragraph 2.3.12
   c. Report of Task F, paragraph 3.4.22

4. Functional Area and/or System Impact:
   a. Functional Area: Force structure - management
   b. System: FORDIMS (FSS)

5. Description of Required Action: To revise the DAMO-FD organization structure action should be taken to consolidate DAMO-FDF and FDP into one division that would be responsible for force management for all years (CY, BY, PY, and out years).

APPENDIX D

SACS IMPROVEMENTS - LONG-TERM

1. Improvement Identification: Data Management

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix F
   b. Report of Task D, paragraph 2.3.k
   c. Report of Task E, paragraph 2.3.12
   d. Report of Task F, paragraph 3.2

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Manpower requirements and authorizations management
      Computations of equipment and personnel requirements
      Distribution of equipment and personnel
   b. Systems:
      FORDIMS (VFDMIS)
      SACS
      VTAADS
      ITAADS
      TOE
      BOIP
      LIN
      MOS
      AAO (RDAISA)
      TAEDP and PEM (DECSOM)
      Others as applicable

5. Description of Required Action:
   a. The evaluation of systems/subsystems specifications will be accomplished by the SYCMACG to assure that the specifications support the functional requirements, established policy, rules, criteria, procedures and other requirements decisions. The

approval of each specification document will constitute the configuration baseline from which the software and other design effort will proceed.

b. The evaluation of program specifications is another configuration management function of the SYCMACG. This evaluation will assure that the program designs are in accordance with the specifications previously approved. The approval of the software and systems design constitute the next baseline from which the development of the software programs will proceed.

c. SACS test plans will be evaluated to assure that each program will be tested to validate that the software program operates in accordance with the software specification and will satisfy the individual functional requirements. Upon approval of the test plans by the SYCMACG, each software program will be tested. Acceptance of each program constitutes the software baseline.

d. Evaluation and approval of the SACS implementation plans by the SYCMACG will be accomplished to assure that the changes to SACS are integrated into the on-line SACS in accordance with an approved schedule and to assure effective systems operation. Management coordination for the implementation of the on-line SACS will be the responsibility of the SYCMACG.

e. The evaluation of the new SACS configuration is an examination of all SACS documentation to assure the newly developed on-line SACS is described accurately. Of particular importance is the accuracy with which the manual and automated procedures are described, for these documents are the basis for controlling the operation of the system and the training necessary to support the operation of the on-line SACS.

f. The SYCMACG will review and update the SACS management plan which was implemented in the near-term phase. The major purpose of this update is to provide for the transition from management of a developing system to the management and control of a fully operational on-line SACS. The key management focus will be configuration management, solving operational problems, system improvement, and ongoing training.

1. Improvement Identification: EDATE Rules

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 2, Section 5, and Appendix A
   b. Report of Task D, paragraph 2.3.c
   c. Report of Task E, paragraphs 2.3.1 and 2.3.3
   d. Report of Task F, paragraph 3.4.1

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Unit configuration
      Manpower strengths and equipment requirements
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      LIN
      MOS
      Others as applicable

5. Description of Required Action:
   a. Completing the EDATE rules specification encompasses formulating and implementing improved EDATE rules in all force structure systems. Incorporated in these specifications will be the control mechanism necessary to assure compliance with EDATE rules as revised.
   b. The EDATE rules software design will be developed from the specifications with the objective of compliance with EDATE rules functional requirements. This software design will serve as the design baseline for EDATE rules from which programs will be written.

c. All software programs necessary to implement EDATE rules will be developed. EDATE programs will be tested in accordance with the approved test plan.

d. Upon completion of the integration test, the EDATE rules programs will be incorporated into force structure systems. The EDATE rules capability will be monitored to assure full operational effectiveness.

1. Improvement Identification: Documentation Change Rules

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix A
   b. Report of Task D, paragraph 2.3.d
   c. Report of Task E, paragraph 2.3.4
   d. Report of Task F, paragraph 3.4.2

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Unit configuration
      Manpower strengths and equipment requirements
      MOS, Grade, and LIN requirements
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      LIN
      MOS
      Others as applicable

5. Description of Required Action:
   a. Develop the software design for implementation and control of documentation rules in accordance with the specifications which were developed in the near term.
   b. Upon approval of the documentation rules software design by the SYCMACG configuration control board, the design will be the basis for developing programs which will execute the documentation rules.
   c. On completion of the acceptance test of the documentation rules programs, the documentation capability will be implemented. After

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ANALYSIS TO DETERMINE FUNCTIONAL AND SYSTEMS REQUIREMENTS FOR A--ETC(U)
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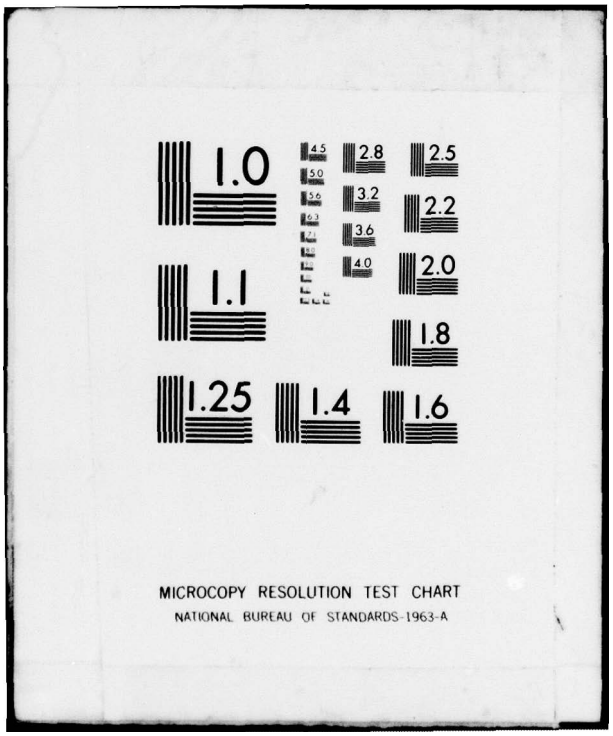
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initial implementation, the documentation rules capability will be monitored to assure compliance with documentation rules, policy, and functional requirements.

1. Improvement Identification: Edit Rules

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix B
   b. Report of Task D, paragraph 2.3.e
   c. Report of Task E, paragraph 2.3.5
   d. Report of Task F, paragraph 3.4.3

4. Functional Area and/or System of Impact:
   a. Functional Area: Data element information
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      TOE
      BOIP
      SHN
      EQPF

5. Description of Required Action:
   a. Complete the edit rules software design in accordance with the approved edit rules specifications which were developed as a near-term action. During this design effort, coordination must be made with other task action specifications and design development to assure completeness of the edit software design.
   b. On evaluation and approval of the edit rules software design by the SYCMACG, edit rules programs will be written.
   c. Upon completion of program testing and approval of the test results, the edit capability will be implemented in accordance with the system implementation plan. The edit rules capability will be monitored during initial operation to assure compliance with edit rules, criteria, policy, and functional requirements.

1. Improvement Identification: Audit Rules

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix C
   b. Report of Task D, paragraph 2.3.f
   c. Report of Task E, paragraph 2.3.6
   d. Report of Task F, paragraph 3.4.4

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      UIC controls
      Personnel and logistics detail record control
   b. Systems:
      FORDIMS (VFDMIS)
      UIS
      SACS
      Others as applicable

5. Description of Required Action:
   a. Upon approval of the audit specifications, the development of the software design will proceed. This development includes the interfaces, storage, and control aspects of the program environment and the design details of program inputs, outputs, and program logic.
   b. The audit capability will be completed when all program specifications are translated into computer instructions, program modules tested and debugged, and test reports approved by the SYCMACG.
   c. The implementation of the audit capability will be completed when the audit program modules are operationally supportive of the SACS functional requirements. Monitoring of the audit program modules should continue for approximately 6 months subsequent to implementation.

1. Improvement Identification: Data Flow - File Balancing

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix F
   b. Report of Task D, paragraph 2.3.g
   c. Report of Task E, paragraph 2.3.7
   d. Report of Task F, paragraph 3.5

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Allocation of manpower and equipment
      Management of manpower authorizations and equipment requirements
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      SACS

5. Description of Required Action:
   a. The software design of the data flow control and data balancing will include a description of the control, storage, and interface and the details of program operating procedures, inputs, outputs, and program logic. The transition from manual control of the flow of data to automated control will assure increased accuracy between files. The design effort will include the coordination of designed data flow constraints throughout all feeder systems.
   b. The data flow and data balancing programs will be completed when all program specifications are translated into computer instructions, tested, debugged, and approved by the SYCMACG.

c. The data flow control and data balancing programs will be integrated with other functional and executive programs and integrated into the SACS data base for operational monitoring. Manual response time standards will also be monitored for compliance with data flow requirements of the on-line SACS.

1. Improvement Identification: Improved SACS Processing

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.4.5
   b. Report of Task D, paragraph 2.4.b
   c. Report of Task E, paragraph 2.4.3
   d. Report of Task F, paragraph 3.4.7

4. Functional Area and/or System of Impact:
   a. Functional Area:
      Force structure
      Resource command management accounts
      Accountability for units and detail records
   b. Systems:
      SIGMA
      SACS

5. Description of Required Action:
   a. The modification and incorporation of the SIGMA process into SACS will be a part of the overall SACS software design. The capability to initiate and control the SACS processing, beginning with freezing the force and continuing through establishing a working SACS data base for producing reports and retrievals through batch or interactive processes, will be inherent in the design effort.
   b. The development of the SACS processing programs involved the interoperability of 12 major modules (proposed) with approximately 80 submodules. The completion of program development will be the approval of the system integration test by the SYCMACG.

c. The implementation of the complete on-line SACS processing will be directly coordinated with the implementation of the majority of other feeder and SACS-related programs. It will be the final implementation effort coincident with the implementation of the SACS data base. This implementation should be monitored for at least two quarterly SACS reporting periods.

1. Improvement Identification: Basis of Issue Plans (BOIP) File

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.5.5 and Appendix E
   b. Report of Task D, paragraph 2.3.h
   c. Report of Task E, paragraph 2.3.9
   d. Report of Task F, paragraph 3.4.8

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      Force structure
      Manpower authorization and equipment requirements management
      Distribution of manpower and equipment
      Unit realignment
      Impact analysis
   b. Systems:
      LOGSACS
      PERSACS

5. Description of Required Action:
   a. The BOIP resource impact processing specifications will be derived from the BOIP resource impact criteria developed in the near term. The specifications will identify the improvement of BOIP for LOGSACS, the incorporation of BOIP data in PERSACS, and the capability to accomplish BOIP impact analysis through an interaction terminal in an on-line environment.
   b. Upon the completion of the BOIP specification, the resource impact software changes will be initiated. The BOIP design will incorporate a control file, a trade-off capability and interaction via a terminal. BOIP processing will be capable of separate processing from all other SACS processing or included with SACS processing. This design will be approved by the SYCMACG as the program specification baseline.

c. The BOIP program specification will be translated into computer instructions to develop the BOIP software program modules. The testing of these modules in accordance with the test plan and the approval of the test results constitute the completion of the BOIP resource impact processing program.

d. The on-line BOIP resource impact capability will be provided to DCSOPS and DCSPER and implemented in coordination with the implementation of SACS. The implementation will be monitored to assure operational performance in accordance with the BOIP functional requirements.

1. Improvement Identification: Table of Organization and Equipment (TOE) File

2. Time Frame: Long-term

3. References:
   a. Report of Task D, paragraph 3.3.1
   b. Report of Task E, paragraph 2.3.8
   c. Report of Task F, paragraph 3.4.9

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Manpower authorizations and equipment requirements management
      Distribution of manpower and equipment
   b. System: SACS

5. Description of Required Action: The new TOE computational file will be implemented into the SACS data base and monitored for functional and operational effectiveness. The file configuration will be approved by the SYCMACG.

1. Improvement Identification: Short Hand Notes (SHN)

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix C
   b. Report of Task D, paragraph 2.4
   c. Report of Task E, paragraphs 2.4.1, 2.4.2, and 2.4.3
   d. Report of Task F, paragraph 3.4.10

4. Functional Area and/or System of Impact:
   a. Functional Areas:
      LIN data control
      Personnel data control
   b. Systems:
      LOGSACS
      PERSACS

5. Description of Required Action:
   a. The on-line SHN software design will encompass an improved processing for notes incorporation in LOGSACS and a new process for incorporation in PERSACS, as two separate SHN systems. This design will also include interactive capability via on-line terminal for both DCSOPS and DCSPER. Both the LOGSACS SHN and the PERSACS SHN program specifications must be approved by the SYCMACG.
   b. Upon completion of the SHN on-line design, the transition of the design into computer instructions will begin. These program modules will be tested in accordance with the approved test plan and evaluated by the SYCMACG.
   c. Both the LOGSACS SHN capability and the PERSACS SHN capability will be implemented and monitored to assure conformance with the program specification and functional requirements.

1. Improvement Identification: Phasing

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix A
   b. Report of Task D, paragraph 3.3.1
   c. Report of Task E, paragraph 2.4.1
   d. Report of Task F, paragraph 3.4.11

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Management of manpower authorizations and equipment requirements
      Distribution of manpower and equipment
   b. Systems:
      LOGSACS
      PERSACS

5. Description of Required Action:
   a. Upon completion of the EQPF specification, the EQPF software design will be initiated. During this design, work coordination with DESCOM is necessary since the phasing data that is input to the EQPF originates from the PEM. Coordination with DCSPER is necessary to assure that personnel availability will coincide with equipment availability.
   b. The EQPF programs will be written in accordance with the approved program specifications. Upon completion and approval of the test results by the SYCMACG, the program modules will be integrated with other SACS programs for implementation.
   c. The EQPF capability will be implemented with the SACS processing capability. After implementation, the EQPF capability will be monitored for operational effectiveness.

1. Improvement Identification: Identification of Reimbursable Personnel Authorizations

2. Time Frame: Long-term

3. Reference: Report of Task F, paragraph 3.4.12

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower accountability
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      PERSACS

5. Description of Required Action: The capability to identify reimbursable spaces and to incorporate that identification into the TAADS detail record will be coordinated with the TAADS proponent. Guidance tracking within the FORDIMS design will be coordinated to provide a positive identification of reimbursable personnel positions.[1] Monitorship of this capability will be conducted to assure compliance with the functional requirements.

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[1]This may not be required since PBG allocation of reimbursable manpower will be by AMS code and field response in command plans, troop lists, and TAADS documents must reflect the identical AMS code.

1. Improvement Identification: Monitor TDA Augmentation Units

2. Time Frame: Long-term

3. Reference: Report of Task F, paragraph 3.4.13

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Manpower authorizations and equipment requirements distribution
   b. System:
      FORDIMS (VFDMIS)

5. Description of Required Action: The capability to identify when an MTOE unit is augmented with a TDA unit will be provided. An automated procedure will determine when an MTOE change has an effect on the associated TDA and then the TDA will be changed accordingly. The capability will also include the assurance that a change in both the MTOE unit and the TDA augmentation unit will have the same EDATE. The relationship between MTOE and TDA augmentation units can be examined on-line through an interactive terminal.

1. Improvement Identification: Input of Detail Data at HQDA

2. Time Frame: Long-term

3. References:
   a. Report of Task C, Appendix I
   b. Report of Task E, paragraph 2.3.7
   c. Report of Task F, paragraph 3.4.14

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Force structure
      Manpower and equipment management, distribution, and accountability
   b. Systems:
      FORDIMS (VFDMIS)
      SHN
      SACS

5. Description of Required Action:
   a. The on-line top load software design will incorporate the capability for force and command managers to make changes to DA AS FORDIMS detail records when exigencies so warrant such action. The top load design will be approved by the SYCMACG.
   b. The translation of the program specifications to computer instructions will complete the development of the on-line top load programs. After testing, the SYCMACG will approve the programs.
   c. The top load capability will be implemented within AS FORDIMS in accordance with the implementation plan. The activation of the top load module will be through interactive processes by force and command managers. This operation will be monitored to assure compliance with functional requirements and system specifications.

1. Improvement Identification: Section II, TAADS Documents Review

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.5.6 and Appendix G
   b. Report of Task F, paragraph 3.4.15

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower authorizations
   b. Systems: None

5. Description of Required Action:
   a. The review of the Section II, TAADS documents provides an improvement to an existing capability to ensure that manpower requirements and authorizations as documented by MACOMs are in accordance with HQDA approved guidance.
   b. Software may be required to incorporate the Section II, TAADS document review specifications which were developed during the near-term time frams.
   c. If software is developed, the SYCMACG will review and approve the program specifications prior to writing the program instructions.
   d. The Section II, TAADS documents review software, if prepared, will be implemented in accordance with the implementation plan and monitored for performance in accordance with the functional requirements.

1. Improvement Identification: LOGSACS and PERSACS Data Base

2. Time Frame: Long-term

3. References:

   a. Report of Task C, paragraph 3.5.7 and Appendix A

   b. Report of Task D, paragraph 2.1

   c. Report of Task F, paragraph 3.4.16

4. Functional Area and/or System Impact:

   a. Functional Areas:

      Equipment procurement, distribution, requisition validation, and redistribution

      Personnel recruiting, training, distribution, promotion, and reclassification

   b. Systems:

      LOGSACS

      PERSACS

      PAAS

      BOIMARS

5. Description of Required Action:

   a. The SACS data base specifications will be based on the data base requirements of the improvements and will require that all units and modernization actions be reflected, including information from the improved BOIP, SHN, and EQPF. The specifications will also incorporate the capability for SACS users to have direct access through an interactive terminal for retrieval purposes.

   b. When the SACS data base specifications are completed, they will be reviewed by the SYCMACG for approval.

   c. The data base will be implemented for on-line retrieval and its use will be monitored in accordance with the data base functional requirements.

1. Improvement Identification: Establish a SACS Data Base Back-Up and Restore Capability

2. Time Frame: Long-term

3. Reference: Report of Task F, paragraph 3.4.22

4. Functional Area and/or System Impact:
   a. Functional Area: Provides a capability for protecting the SACS data files
   b. System: SACS

5. Description of Required Action:
   a. The establishment of a SACS data base back-up and restore capability will be based on the requirements which were completed in the near-term time frame. The capability will preclude the loss of interactive work due to system or other failure.
   b. The system back-up and restore capability will be activated by users based on circumstances and specific need.
   c. The software design must accommodate the work files used in the various SACS processes as well as the entire modified SACS file as required.
   d. Programs will be prepared in accordance with approved specifications by using as many available utility programs as possible. After the programs have been prepared and tested, the capability will be readied for implementation. This capability will be monitored during initial on-line SACS operation.

1. Improvement Identification: SACS Documentation

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 7, Section 5, and Appendix A
   b. Report of Task D, paragraph 2.4
   c. Report of Task E, paragraph 3.2
   d. Report of Task F, paragraph 3.4.18

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower authorizations and equipment requirements management
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      TOE
      BOIP
      SHN
      EQPF
      SACS

5. Description of Required Action:
   a. As work progresses on the implementation of the long-term improved/on-line SACS, the documentation will be updated and changed as required.
   b. The SACS Systems and Procedures Manual must be revised on a regular basis after each procedure change has been approved by the SYCMACG.
   c. The changes to SACS Functional User's Guide will be made sufficiently in advance of the implementation of changes to permit the users to become acquainted with the new systems and what data are either new or more readily available.

d. The improved/on-line SACS, once completely implemented, will be documented in accordance with DOD Standard 7935.1-S.[1]

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[1]Required ODCSOPS and ODCSPER approval.

1. Improvement Identification: Develop Changes to Existing Data Elements

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.5.6
   b. Report of Task D, Section 3 and Appendix A
   c. Report of Task E, paragraphs 2.4.1 and 3.1
   d. Report of Task F, paragraph 3.4.19

4. Functional Area and/or Systems Impact:
   a. Functional Areas:
      Force structure
      Manpower and equipment management and distribution
   b. Systems:
      FORDIMS (VFDMIS)
      VTAADS
      ITAADS
      TOE
      BOIP
      EQPF
      SHN
      SACS

5. Description of Required Action:
   a. From the time the SACS Data Element Directory baseline is approved by the SYCMACG in the near-term period, changes to the data element descriptions or values must be examined as to their effect on feeder and supporting systems. During the development of the program specifications, if modifications are required to data elements which are approved by the SYCMACG, they will be incorporated into the Data Element Directory. All such approved modifications should be incorporated into the baseline documentation at the time changes are implemented in the system.

b. On final acceptance of the system, the Data Element Directory will provide the data element standard for SACS and all feeder systems. It therefore should be maintained under configuration control during the life cycle of SACS.

1. Improvement Identification: Data Sychronization

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraphs 3.4.1 and 3.5.6 and Appendix F
   b. Report of Task D, paragraphs 2.2. and 2.3
   c. Report of Task E, paragraphs 2.3.12 and 2.4.1
   d. Report of Task F, paragraph 3.4.20

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Manpower and equipment management and distribution
      Manpower accountability
      Force structure
   b. Systems:
      FORDIMS (VFDMIS)
      UIS
      VTAADS
      ITAADS
      TOE
      BOIP
      SHN
      EQPF
      SACS

5. Description of Required Action:
   a. The completion of the data synchronization specifications will incorporate editing and control procedures to ensure the capability to interface files and records and to ensure that changes to control data values of all interfacing systems will be implemented at the same time.
   b. This action will be to complete the data synchronization software design to implement the specification. The development of

this design will be coordinated with the design effort of all feeder and supporting systems.

c. The completion of the data synchronization program involves the implementation of program specifications in computer instructions and the acceptance testing of the data synchronization program module.

d. After the data synchronization program test is completed, a program integration test must be completed to assure that all programs will interoperate. Successful completion of this test will complete the implementation of the data synchronization capability.

1. Improvement Identification: Upgrade PAAS and BOIMARS

2. Fime Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.4.5
   b. Report of Task F, paragraph 3.4.21

4. Functional Area and/or System Impact:
   a. Functional Area: Manpower authorization and equipment requirements management and accountability
   b. Systems:
      LOGSACS
      PERSACS

5. Description of Required Action:
   a. Upon the completion of the specification for the new SACS processing, the PAAS and BOIMARS upgrade specification will be initiated. This specification should include mathematical techniques for both on-line and batch analysis.
   b. The development of the PAAS and BOIMARS software design will be completed when the program specification incorporates the functional requirements.
   c. The transition from program specifications to computer instructions and the testing of those programs marks the completion of the PAAS and BOIMARS programs.
   d. Implementation of the PAAS and BOIMARS analytical capability will be tested, implemented, and monitored to assure compliance with functional requirements.

1. Improvement Identification: Revise the DAMO-FD Organizational Structure

2. Time Frame: Long-term

3. References:
   a. Report of Task C, paragraph 3.5.6
   b. Report of Task E, paragraph 2.3.12
   c. Report of Task F, paragraph 3.4.22

4. Functional Area and/or System Impact:
   a. Functional Area: Force structure - management of unit records for all years (current, budget, program, and out years)
   b. System: FORDIMS FSS

5. Description of Required Action: Upon implementation of the improved on-line SACS, a reasonable "settling-in" period should take place, at which time the entire SACS supporting organization and staffing should be reviewed. This review will be to determine if the then existing organization structure, staffing, and procedures are adequate to permit a smooth and efficient SACS operation.

1. Improvement Identification: SACS History

2. Time Frame: Long-term

3. References:
   a. Report of Task D, paragraph 2.4.b
   b. Report of Task F, paragraph 3.4.17

4. Functional Area and/or System Impact:
   a. Functional Areas:
      Comparative analysis of SACS products
      Historical research
   b. Systems:
      PAAS
      BOIMARS
      Retrieval (to be established)

5. Description of Required Action:
   a. SACS history specifications will provide that copies of the SACS data base for each SACS run for the CY, BY, PY, plus 4 out years will be maintained on magnetic tape; these tapes will be maintained for at least 7 years; the tape will be available to be loaded to disk for analysis by PAAS, BOIMARS, or any other analytical software that may be required.
   b. Once the specifications have been defined and approved by the SYCMACG, the SACS history software design can be initiated. The design of the SACS history software will consider the software being designed for the PAAS and BOIMARS and can probably be existing utility programs.